



City of Kingman General Plan Update 2030

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CHAPTER 1

GOALS AND OBJECTIVES LAND USE ELEMENT

GOAL: To create the environment that makes Kingman the heart of historic Route 66 and the crossroads of the Southwest, a place its residents proudly call home because there are outstanding economic opportunities and numerous employment options, excellent post-secondary educational opportunities, a healthy business climate and diverse recreational and cultural amenities.

Objective 1: Promote Kingman as the place to live, be employed, become educated, and to locate a business.

Objective 2: Provide aesthetically pleasing streetscapes to accommodate all modes of transportation.

Objective 3: Encourage compatible mix of land uses, which allows accessibility to goods and services without extensive travel.

Objective 4: Develop Kingman into a place that is internationally and domestically known as a Historic Route 66 destination.

GROWTH AREA ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL: To promote managed, economically sound and orderly growth that supports a variety of land uses, conserves natural resources, reduces automobile dependency, and provides for the logical expansion of infrastructure and service capacities.

Objective 1.0: Encourage infill development to occur in the Downtown, Stockton Hill Road, and Hualapai Mountain Road corridors to promote the most cost efficient and logical expansion of public services and infrastructure.

Policies:

- 1.1 Expand the public infrastructure and encourage redevelopment and infill through the use of private enterprise, neighborhood projects, redevelopment districts, and Infill Incentive Districts.

- 1.2 Target public investments and infrastructure improvements with the use of assessment districts and improvement districts within the Downtown, Stockton Hill Road and Hualapai Mountain Road corridor growth areas that are surrounded by or adjacent to existing infrastructure.
- 1.3 Consider incentives for new development such as lower permit fees and development fees where appropriate in the Downtown, Stockton Hill Road and Hualapai Mountain Road corridor growth areas.

Objective 2.0: Work with other jurisdictions to ensure that all development that occurs within the City's water service boundary is in accordance with City development standards.

Policies:

- 2.1: The Municipal Utilities Commission may recommend and the City Council may require any development outside the City limits requesting a water extension and/or a water meter to meet the following City requirements and policies:
 - The Minor Lot Splitting Ordinance requirements
 - Subdivision Ordinance requirements
 - Street improvement requirements
- 2.2: The City and Mohave County should work together for a coordinated improved street system, including paved streets, curb, gutter and sidewalk, wherever feasible.
- 2.3: Coordinate with the State Land Department on preparing plans and the timing of development for State Trust lands which support the Kingman General Plan 2030.
- 2.4: The City and the Kingman Airport Authority should work together to identify methods to mitigate potential conflicts between the airport and nearby uses, such as requiring the recording of aviation easements for properties lying within two miles of the Airport boundary which are located inside aircraft over flight zones.

Objective 3.0: Encourage a planned mixture of land uses that provides for a choice of transportation modes which reduces automobile dependency, provides for needed public open space and creates a sense of place.

Policies:

- 3.1: A mixture of housing types, densities, prices, rents and designs should be provided throughout Neighborhood Planning Areas with higher density areas near improved collector streets and close to commercial and public service areas.
- 3.2: Encourage commercial development to occur around identifiable nodes and discourage strip commercial development.
- 3.3: Neighborhood centers and gathering places in central locations should be encouraged.
- 3.4: Offer incentives for developers to create Planned Development Districts with a variety of retail and employment opportunities, housing choices, public open spaces and multi-modal transportation options.
- 3.5: Provide safe pedestrian and/or bicycle paths between and within neighborhoods, shopping areas, employment, and parks/open space areas by assigning them greater priority in the City's Street Policy and Subdivision standards.
- 3.6: Coordinate developer plans with the City's *Parks, Recreation, Trails and Open Space Element* of the General Plan with regard to provisions for parks and other recreational areas.
- 3.7: Provide for the development of a public transit system to link neighborhoods, shopping, employment, and public service areas and promote transit-friendly design and amenities.
- 3.8: Follow Overlay District standards where appropriate to ensure new development fits within existing neighborhoods in terms of scale, design circulation, etc.

REDEVELOPMENT AND PUBLIC FACILITIES AND BUILDINGS ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL: To rehabilitate and expand residential and commercial development, maintain and enhance governmental and public use facilities while preserving the historic heritage of downtown Kingman.

Objective 1.0: Preserve and enhance the historic heritage and preserve a sense of place in the downtown area.

Policies:

- 1.1: Upgrade and enhance development along the Route 66 frontage while preserving the historic fabric of the area.
- 1.2: Maintain and potentially expand the existing Historic Overlay District and use a historic building code to provide alternative building regulations for the rehabilitation, preservation, or restoration of structures designated as historic buildings.
- 1.3: Support the strong transportation infrastructure that made this location the heart of Mohave County to encourage an active downtown area.
- 1.4: Support, enhance and encourage opportunities for new housing development as well as preserve existing and historic houses wherever possible.
- 1.5: Support the positive open space and park system enhancements to provide for the needs of area residents and to attract tourists.
- 1.6: Encourage the disbursement of social service uses throughout the community so as to remove any perception problems regarding redevelopment.
- 1.7: The rehabilitation of low to moderate income housing through the use of Community Development Block Grants and other available State, Federal and private sources of funding should be tapped to assist in the provision of affordable housing for all citizens.

Objective 2.0: Support the private sector in playing a major role in the enhancement of commercial businesses to rejuvenate the downtown area with a variety of compatible land uses and implement programs to fund the ongoing maintenance standards of the downtown area.

Policies:

- 2.1 Support and enhance a single cohesive downtown association dedicated to commercial improvements in the area.
- 2.2 Explore the use of the Main Street approach with regard to organization, design of physical improvements, promotion, and economic restructuring in the downtown area.
- 2.3 Land bank property or be prepared to acquire properties as they become available for redevelopment efforts.
- 2.4 Allow light industrial uses only if they enhance supportive job creation in the area.

Objective 3.0: Maintain a daytime workforce and customer base by enhancing the governmental center and area schools.

Policies:

- 3.1 Consider a civic center and activity center in historic Downtown.
- 3.2 Support the upgrading of local educational facilities (high school, elementary school) located in the area.
- 3.3 Support and develop policies to continue historic Downtown as the center of government in Kingman and Mohave County. The City should work with other governmental entities to the fullest extent possible to encourage the development and maintenance of governmental offices in the downtown area.

Objective 4.0 Provide adequate, efficient and safe public services and facilities to all residents and properties in the City.

Policies:

- 4.1 Construct and staff a fire station in the northeastern quadrant of the City
- 4.2 Upgrade or replace Fire Station #2 to consolidate fire management personnel and equipment.
- 4.3 Develop water pressure zones to serve all incorporated areas of the City.
- 4.4 Extend sanitary sewer lines throughout the water service area of the City.

CIRCULATION ELEMENT

GOAL: Provide a safe, efficient, and aesthetically pleasing circulation network which considers all modes of vehicular and non-vehicular movement.

Objective 1.0: Create safe and efficient patterns of circulation.

Policies:

- 1.1 Provide criteria for the location of ingress and egress points on all arterial and collector streets.
- 1.2 Review the current policies for curbs, gutters and sidewalk placement.
- 1.3 Encourage secondary access in all areas that plan to develop over 100 residential lots or commercial and industrial areas.
- 1.4 Develop a program to pave all streets that have development on them or serve as the access to developed areas.

Objective 2.0: Provide aesthetically pleasing circulation systems.

Policies:

- 2.1 Develop roadway landscape standards for landscaped medians and other portions of the unpaved rights-of-way.
- 2.2 Encourage the design of off-street parking area to be adequately landscaped.

Objective 3.0: Provide for and encourage use of non-vehicular modes of transportation

Policies:

- 3.1 Ensure that new developments will be designed and provide for pedestrian and bicycle paths.
- 3.2 Develop standards for bikeways systems along roadways, off-road areas and in drainage ways.

PARKS, RECREATION, TRAILS AND OPEN SPACE ELEMENT

GOALS, OBJECTIVES AND POLICIES

GOAL: To provide the necessary recreational opportunities to meet the needs of the citizens of Kingman through the acquisition of land for open space and park sites and the funding and development of new parks and trails while remaining committed to maintaining and improving the condition and safety of existing facilities and programs.

Objective 1.0: Provide newly developed park space city-wide, based on the level of service standards established in this plan to address growth and maintain and improve the existing high quality park system expected by the citizens of Kingman.

Policies:

- 1.1: Concentrate park development efforts on neighborhood parks and play lots to provide developed park space within walking and bicycling distance of area residents.
- 1.2: Open space, parks and recreation uses should be a high priority in the development of any State Lands.
- 1.3: Consideration should be given to requiring open space, parks and recreation areas in developments and subdivisions.
- 1.4: Hold public hearings and use other forms of citizen input prior to the creation of parks and play lots to ensure strong neighborhood support and commitment to the project.

Objective 2.0: Continue the current program of open space acquisition, concentrating on areas of unique geographical formation areas with limited development potential due to slope or flooding potential, and areas of archeological significance.

Policies:

- 2.1: The mountains, hillsides, buttes and viewsheds that frame the Kingman area as well as natural habitat areas should be preserved. The purchase of property for the preservation of open space and providing buffers to development should be prioritized within the designated open space reserves.

- 2.2: Flood zone areas, drainage easements/parcels, watercourses and drainageways should be maintained as parks, open space and greenbelts whenever feasible.
- 2.3: Continue to work with the Bureau of Land Management to acquire property for open space preservation as part of the Cerbat Foothills Recreation Area.

Objective 3.0: Ensure that access to and between open space areas is protected and preserved and improve these connections with developed multi-use paths and trails.

Policies:

- 3.1: Follow the recommendations of the *City of Kingman Pedestrian and Bikeway Plan 2000* with regard to developing bicycle and pedestrian facilities.
- 3.2: Develop multi-use paths and trails along washes, utility and transportation corridors to connect parks and open space areas, creating linear parks.
- 3.3: Continue to work with the U.S. Bureau of Land Management (BLM) to plan and develop multiple use trails in the Cerbat Foothills Recreation Area based upon the management agreement signed by both entities.

Objective 4.0: Continue and improve current efforts to address the constantly changing demand for recreational programs to serve all elements of Kingman's population.

Policies:

- 4.1: Use questionnaires and community surveys to identify the level of community interest in various City programs and facilities.
- 4.2: Continue to monitor park space to determine which facilities are overused or abused.

Objective 5.0: Identify and use where appropriate various funding sources for the acquisition, development, operation and maintenance of parks, recreational programs, open space and trails.

Policies:

- 5.1: Acquire property for parks, open space or trails through a variety of means including, land donations, General Fund budgeting, general obligation bonds, land trades, grant programs, cooperative agreements with other governmental agencies, purchases for other public facilities and the Arizona Preserve Initiative.

5.2: Fund construction of parks and trails through the General Fund budgeting, grant funds and general obligation bonds.

5.3: Keep user fees to the minimum needed to cover direct costs of the programs in order to make them as affordable and accessible as possible.

Objective 6.0: Address safety issues in the design, development, and maintenance of park and open space areas.

Policies:

6.1: Parks should be safely accessible by pedestrians and bicyclists.

6.2: New park facilities will incorporate low-maintenance features to address maintenance and vandalism issues from the onset.

6.3: New park site plans will incorporate safety features. These could include separating sports areas from picnic and playground areas, allowing for emergency vehicle access and providing security lighting in any restroom buildings.

6.4: Explore the possibility of working with private organizations toward developing an adopt-a-park or adopt-a-trail program to assist with maintenance and vandalism issues.

COST OF DEVELOPMENT

GOALS, OBJECTIVES AND POLICIES

GOAL: To apportion the costs of development by ensuring that development pays its “fair-share” of the costs of additional public service facilities, and needs generated by new development.

Objective 1.0: Ensure that City services, facilities, equipment and infrastructure properly serve the community in a manner that enhances quality of life, optimizes existing facilities, and provides for future needs.

Policies:

- 1.1 Identify levels of service indicators for the delivery of City services that reflect the typical experiences of residents and visitors.
- 1.2 Maintain adequate levels of City facilities and services for existing and new development.
- 1.3 Identify strategies for redevelopment and infill and enhancing existing service delivery for City residents and visitors.
- 1.4 Identify and use a variety of sources to finance necessary City services, facilities, equipment and infrastructure that meet community needs, including consideration of levying a primary property tax, if approved by the voters.
- 1.5 Adopt the City’s Capital Budget program annually as well as a five year program.
- 1.6 Form special improvement districts to provide for improvements such as utility undergrounding, and storm drainage updates in specific areas.
- 1.7 Encourage dedication of open space; parks and park sites in consider conjunction with development.
- 1.8 Evaluate public/private partnerships, and development agreements.
- 1.9 Require concurrent infrastructure development with any hard zoning approval.

Objective 2.0: Ensure new development pays its fair share of municipal costs necessary to support impacts created by new development.

Policies:

2.1: Continue to require new development pay for its fair, proportionate share of service and infrastructure costs through development agreements, development impact fees, community facilities districts and other appropriate methods.

2.2: Periodically review the need for development impact fees to ensure that the City collects sufficient monies to construct additional infrastructure needed to serve new residents and businesses developing in Kingman.

Objective 3.0: Coordinate with non-municipal utility providers to ensure adequate services are provided for existing users as well as new development.

Policies:

3.1: Work with non-municipal utility providers to ensure adequate levels of service and upgrade services for new development as necessary.

3.2: Coordinate with non-municipal utility providers in the planning of new facilities/corridors and upgrade and/or expansion of existing facilities.

Objective 4.0: Cooperate with other governmental and public entities as a strategy to reduce and share certain costs of development.

Policies:

4.1 Coordinate with Mohave County with regard to sharing infrastructure improvement costs prior to annexation.

4.2 Encourage infrastructure improvements that meet City development standards in County areas subject to annexation.

4.3 Actively coordinate with local school districts, charter schools and institutions of higher learning in the planning, construction and rehabilitation of joint use facilities.

ENVIRONMENTAL PLANNING ELEMENT

WATER RESOURCES

GOALS, OBJECTIVES AND POLICIES

GOAL: To ensure that all development within the municipal water system service area shall have an adequate and secure source of water for domestic use and fire protection flows.

Objective 1.0: Maintain current and long term water demands through sustainable and appropriate development.

Policies:

- 1.1: Approve new water service in accord with the Municipal Utility Regulations.
- 1.2 Continue to use Mohave County Water Authority funds to upgrade, enhance and expand water resource opportunities for the Kingman Municipal Water System.
- 1.3 Encourage development to occur adjacent to existing utilities.
- 1.4 Work with other jurisdictions to discourage remote 40 acre subdivisions and their unregulated lot splitting that could have the cumulative effect of damaging ground water resources.

Objective 2.0: Continue and enhance water conservation programs and policies.

Policies:

- 2.1: Develop a plan for groundwater recharge within the next 10 years.
- 2.2: Conserve groundwater resources by utilizing water conservation techniques, water conserving appliances in home, businesses and industrial uses and encourage appropriate drought tolerate landscaping.
- 2.3: Encourage low water use economic development enhancements in the community.
- 2.4: Discourage large water users from establishing in the community.

Objective 3.0: Protect the City's water resources from all potential sources of contamination

Policies:

- 3.1: Absolutely protect the existing ground water, the current sole source for Kingman's water from any pollution that will downgrade the community's quality of life.
- 3.2: Absolutely protect city well and tank sites from unauthorized entry, sabotage and other terrorist-type activities through the use of fencing, locked gates, alarm systems, and other security measures as needed.

Objective 4.0: In the next 10 years, develop an economically effective use of reclaimed effluent.

Policies:

- 4.1: Discourage the development of artificial lakes unless using reclaimed water or effluent.
- 4.2: Explore the use of reclaimed effluent where there is a site-specific demand that is sufficient to justify the investment for the requisite infrastructure.
- 4.3: Keep user fees to the minimum needed to cover direct costs of the programs, in order to make them as affordable and accessible as possible.

AIR QUALITY AND RESOURCE CONSERVATION

GOALS, OBJECTIVES AND POLICIES

GOAL: To ensure the maintenance of high air quality standards and the conservation of natural resources in the Kingman area while encouraging quality development to enhance the image of the area.

Objective 1.0: Develop policies and continue programs to help the area's air quality by decreasing automobile dependence by promoting pedestrian, bicycle and transit alternatives.

Policies:

- 1.1 Expand City's sidewalk system along existing streets through the establishment of improvement districts and other funding mechanisms whenever feasible.
- 1.2 Continue to enforce bicycle parking requirements which require most new development to install bicycle racks.

- 1.3 Continue to promote and expand, as needed, the Kingman Area Rapid Transit (KART) system.
- 1.4 Consider land use policies that place services in proximity to residential areas to decrease the necessity of vehicle trips.
- 1.5 Encourage employers with over 25 employees to develop traffic reduction programs such as car pooling.

Objective 2.0: Develop policies and enforce existing ordinances designed to reduce existing air and water pollution sources.

Policies:

- 2.1: Monitor air quality at construction projects and enforce existing City dust control ordinance.
- 2.2: Enforce ordinances against clear grading of property unless immediately prior to development and continue to require permits for other grading projects.
- 2.3: Promote the paving of unpaved streets through the Low Cost Maintenance Paving Program and through Improvement District projects.
- 2.4: Continue to enforce paved parking requirements for new commercial and commercial areas that have a change of use or occupancy.
- 2.5: Protect area aquifers from degradation from non-point pollution sources by continuing to monitor well sites for pollution contaminates.
- 2.6: Support zoning and development policies which support industries that are not “major point-source of pollution” operations.

Objective 3.0: Develop policies and enforce existing ordinances to mitigate potential hazards to development caused by the natural and man-made environment

Policies:

- 3.1: Continue to enforce the Hillside Development ordinance in hillside areas.
- 3.2: Limit development around the hills and buttes and similar topographic features in order to protect the public from erosion and geologic hazards. Foothill development should be limited to rural or low density residential.

- 3.3: Street grids should respond to topography. Cuts and fills should be avoided where possible. Curvilinear streets may have to be used in some instances.
- 3.4: Continue to implement the recommendations of the Kingman Area Master Drainage and Design Manual to serve as a guide for providing a storm drainage system in Kingman, which offers the greatest affordable protection from hazards and nuisances and which complies with State, Federal and local regulations.

Objective 4.0: Promote environmental awareness, conservation of resources and methods to protect and enhance the image of Kingman

Policies:

- 4.1: Promote the use of energy efficient site design and construction techniques.
- 4.2: Promote the use of passive solar energy to light and heat residential, commercial, industrial, and public/government buildings.
- 4.3: Encourage the use of low-water use vegetation and other drought-tolerant plants, as developed by the local Soil Conservation Office, especially along sidewalks, in parking lots and along streets.
- 4.4: Encourage the preservation of the original landscape wherever feasible.
- 4.5: Identify strategies to reuse effluent for irrigation purposes.
- 4.6: Continue adequate solid waste collection and disposal which complies with Arizona Environmental Regulations, minimizes solid waste, and provides opportunities for recycling.
- 4.7: Implement education programs to raise awareness of impacts of littering on Kingman's environment.
- 4.8: Enforce the Public Nuisances and Property Maintenance Ordinance and Anti-Noise Ordinance to abate trash, weeds, unkempt buildings, inoperable vehicles and other potentially hazardous or offensive uses.
- 4.9: Continue to enforce the Outdoor Lighting Code to promote dark skies.
- 4.10: Continue to enforce the Underground Utility Ordinance

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CHAPTER 2

DEMOGRAPHICS

2010 U.S. CENSUS

In reviewing the findings from the 2010 decennial U.S. Census for Kingman, Mohave County, the State of Arizona, and the United States as a whole, a profile of Kingman can be developed to see how the community compares to the county, state and nation. From a population standpoint point, Kingman has about 14-percent of the Mohave County population on about one-fourth of one percent of the Mohave County land area. Although the City has a lower percent (19.1%) of its population over 65-years of age compared to 24-percent of the overall Mohave County population (24%), the City exceeds the State's percent of 14.2-percent and the national percentage of 13.3-percent.

The median age in Kingman is 38.7 years, which is slightly younger than the Mohave County median age of 42.8.

RACIAL COMPOSITION

Kingman has a predominantly white population (88%), which is lower than the Mohave County percentage of 92.5-percent, but higher than the State percentage of 84.6-percent and the national composition of 78.1-percent. However, Kingman exceeds the County, State and nation in the percentage of white residents who are not Hispanic (81.3%). The City exceeds all comparison population groups in people reporting to be two or more races (3.1%). Kingman's Hispanic population percent is lower than the County, State and nation.

EDUCATION

Kingman has a higher percentage (86.6%) of high school graduates or greater than Mohave County (83%), the State of Arizona (85%) and the nation (85%). Even though the City's population exceeds the Mohave County percentage of people with bachelor degrees or higher, (15.4% compared to 12%), the City fall significantly below the State of Arizona percentage of 26.3-percent and the national average of 27.9-percent. From information gathered by the consulting firm, Buxton, in 2012, Kingman has 34-percent of its population whose highest educational achieve is a high school diploma; 27.9-percent with some college, but no degree; 8.8-percent with an associates degree; 10-percent with a bachelor degree; and 5.3-percent with a graduate degree.

HOUSING

Homeownership percentage is slightly lower in Kingman (64.9%) than Mohave County (71.5%), the State of Arizona (67.4%), and the nation (66.6%). Housing values are lower in Kingman than in the comparative jurisdictions. A median value of an owner-occupied

house in Kingman from 2006 to 2010 was \$161,700. Mohave County has a median housing value of \$171,000 for owner-occupied housing units and such housing in the State of Arizona had a median value of \$215,000. Nationally, the median value of an owner-occupied house was \$188,400.

INCOME

According to the 2010 U.S. Census, the median income in the City was slightly higher (\$43,849) in 2006-2010 than the County (\$39,785), but lower than the State's median income of \$50,448 and the national median income of \$51,914. The 2007 retail sales per capita figure for Kingman was \$36,218, which is significantly higher in the City than Mohave County (\$14,489), the State's per capita of \$13,637, and nationally of \$12,990. Bullhead City had a per capita retail sale figure of \$13,919, and Lake Havasu City had a per capita retail sales figure of \$15,414. This latest statistic is not as a result of Kingman residents spending significantly more than the average county, state, or US citizen, but rather, it demonstrates that Kingman serves more county residents and travelers.

Information provided to the City by Buxton, shows the 2012 average household income to be \$54,992, with the median income being \$45,828, and the per capita income of \$22,384. There was 11.2-percent of the Kingman's population with a household income over \$100,000. The percent of households with a household income under \$35,000 a year is 37.2-percent. Therefore, 51.6-percent of the households in Kingman have an annual household income of more than \$35,000, but less than \$100,000.

VEHICLES

There were 20,262 vehicles in Kingman, which averages to two vehicles per household. However, 62.5-percent of the households (approximately 7230-households) have two or more vehicles, 34.2-percent (approximately 3950-households) have only one vehicle, and 3.4-percent (approximately 390-households) have no vehicle.

POVERTY

Kingman has slightly less of its population living below the poverty level (13.2%) in comparison to Mohave County (16.1%), the State of Arizona (15.3%) and nationally (13.8%). Kingman appears to be close to the national norm.

ECONOMY

In 2011, Mohave County commissioned a Target Industry Analysis to provide a strategic framework for public policy by identifying those industries that share the demand for a similarly educated labor pool, supply chain or customer base. It's a method utilized by economic development organizations to understand the market and align their limited resources in order to more effectively create jobs, brand, and market their community and region.

This Targeted Industry Analysis focused on the southern portion of Mohave County, where the majority of the population and economic activity is concentrated. The three distinct regions analyzed for this study included Bullhead City/Laughlin, Kingman, and Lake Havasu City.

Most of the data utilized in this analysis comes from the U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and IMPLAN. The data year for employment, industry wages, and occupational wages is 2009. Industry growth rates are measured from 2005 to 2009 and occupational growth projections are for 2008 to 2018, which is the most current data available. Industries were categorized by the North American Industrial Classification System (NAICS) used in the United States, Canada, and Mexico.

There are several steps utilized in the analysis to identify industry targets and ultimately the aggregation of industries into cluster families. After defining the study area, an analysis of existing employment is undertaken to uncover the concentration of employment by industry, its growth rate and the average industry wage based on payroll.

The Kingman Economic Region is made up of eight zip codes that encompass 2,133 square miles, which contained 61,735 people in 2009. The Kingman region has the highest population density of the three geographies detailed in the Mohave County Target Industry Analysis at 28.9 persons per square mile, whom compose a total of 24,063 households, with a household size of 2.6. Approximately 52 percent of these households earn between \$15,000 to \$50,000. Total employment in this economic region is 21,334 persons with an average income of \$40,027. The major employers in the Kingman Economic Region include Kingman Regional Medical Center, American Woodmark Corp., IWX Motor Freight, and McKee Foods.

The industry clusters represent the priority areas approved by the regional economic development partners. Over time these clusters should be reviewed and updated in order to respond to changing market conditions and maximize economic development opportunities. The industry cluster recommendations are not intended to entirely replace existing economic and workforce development efforts, but rather supplement them. For example, workforce development efforts in the County should continue to focus on areas of need such as construction and waste management training.

The Target Industry Analysis provides an overview of each industry cluster identifying the types of industries embodied within the cluster, its significance in the region, and how well it pays in aggregate.

Aviation

The Aviation Cluster provides commercial and industrial aviation operational support services, as well as, the manufacturing of aviation parts and products, and the restoration of airplanes and other aviation equipment. Specific Aviation Cluster activities include airport operation and maintenance, airplane restoration, airplane maintenance, and airplane hangar storage.

The existing Aviation Cluster in the Kingman Economic Region at the Kingman Airport builds on the historic use of the area for an Air Force training field, then one of five national aircraft disposal centers, which involved storage, sales, and scrapping activities. Once these Armed Forces activities subsided, the airfield was transferred to civilian use in 1949. The Industries that make up the existing Aviation Cluster in Mohave County have an average annual pay of \$62,197, surpassing the total Mohave County Industry annual pay of \$39,133 by \$23,064.

Energy

The Energy Cluster produces electricity through various means of generation including, but not limited to, natural gas, biomass, wind, PV solar, and other fuel sources. This Cluster also involves the transmission and distribution of electric power, and distribution of natural gas.

Certain energy industries are growing nationally, as well as locally, as government policy hopes to nudge the industry to cleaner burning fuels and alternative energy sources. The Kingman Economic Region receives its natural gas supplies through pipelines that originate in New Mexico and Texas. In addition, much of Northern Arizona has been rated favorably for wind power generation potential. At \$78,016, the existing industries in the Energy Cluster in Mohave County exceed the County's average annual industry pay, \$39,133, by \$38,883.

Healthcare Services

The Healthcare Services cluster includes industries offering health services primarily to the general public through hospitals, medical facilities and offices. The Healthcare Cluster includes a full spectrum of health services including mental health, pediatrics, acute care, long-term care, outpatient services, home healthcare, and elderly care.

Each Economic Region contains a hospital facility and is poised to add healthcare facilities as the population grows larger and demand increases for these services. The existing Healthcare Services Cluster in Mohave County has average annual pay of \$51,327, which is \$12,194 higher than the overall County average annual pay of \$39,133.

Manufacturing

The Manufacturing Cluster is involved in the production of hard-goods ranging the gamut of materials from composites and metals, to plastics and refractory materials. These goods may be simple one piece components, mechanical devices, electronics, complex multiple part apparatus, or anything in between.

Manufacturing Industries have been a mainstay of the Arizona economy for decades, and the Mohave County Region is no exception. The Kingman Economic Region contains the most manufacturing activity, followed by the Lake Havasu City Economic Region. The

industries that make up each economic region's cluster vary, however the Average Annual Pay for all manufacturing industries currently operating in the Clusters identified in Mohave County is \$50,630, and is \$11,497 higher than the overall Mohave County Average Industry Wage at \$39,133.

Mining

The Mining Cluster includes industries involved in and supporting the extraction of naturally occurring mineral solids, liquids, and gases. It also includes quarrying, well operations, and the general processing of mined material. The core of this cluster operates mines, quarries, and wells, while the main mining support activities include geophysical exploration.

The Mohave County Mining Cluster has its roots in the extraction of metallic ores and non-metallic minerals. This Cluster is experiencing resurgence as metal prices have increased over the last decade and many uranium claims have been established of late, in the immediate vicinity. Mohave County also contains oil and natural gas extraction activities, in addition to coal mining, which support energy generation, and the quarrying of sand and gravel. The Mining Cluster in Mohave County pays an average annual wage of \$71,218, which is \$32,085 higher than the overall Mohave County Average Industrial Annual Pay at \$39,133.

Motorsports

The Motorsports Cluster provides products and services to the myriad of motorsports industries including but not limited to the automotive, motorcycle, marine, off-road, street-legal, and professional track and other racing motorsport activities. These products and services include parts suppliers, fabricators, maintenance, restoration, and after-market replacement and upgrade components manufacturers, suppliers, wholesalers, and retailers.

Although the Motorsports Cluster is considered to be in the Lake Havasu City Economic Region, many Kingman residents are employed in the test facilities located in Yucca. The Motorsports Cluster is largely made up of industries that appeal to automotive enthusiasts. This economic region is based upon an original planned community that has always focused on tourism, and motor boating in particular. The Motorsports Cluster in Mohave County enjoys a higher average annual pay than the County as a whole at \$41,048, which is \$1,915 higher than the overall Mohave County Average Industrial Annual Pay at \$39,133.

Transportation and Logistics

The Transportation and Logistics Cluster is primarily involved in the movement of goods, including but not limited to, freight hauling, storage, and distribution. The core of this cluster revolves around trucking, rail hauling, and warehousing, however, includes air and marine freight and other storage and distribution activities.

The Kingman Transportation and Logistics Cluster is currently in a strategic position for growth as Pacific ports and other west coast inland ports continue to reach capacity and push eastward. The ability for multimodal transportation opportunities also abound with Kingman's access to major highway, rail, and airport operations in the vicinity. The Transportation and Logistics Cluster in Mohave County pays an average annual wage of \$67,623, which is \$28,490 higher than the overall Mohave County Average Industrial Annual Pay at \$39,133.

2015 DEMOGRAPHIC PROJECTION

Kingman is projected to grow at a five-percent annual growth rate to a 2015 population of 36,000. The projected average household size will be 2.38 persons per household, down from the current 2.52 persons per household. Although Kingman is projected to grow, it is projected to lose a number of its young adults. Incomes will rise slightly.

Employment

The U.S. Bureau of Labor Statistics information for Mohave County is the same as the labor statistics for the Lake Havasu City-Kingman Metropolitan area. In comparison with the State of Arizona, Mohave County shows a lower than average percent of its labor force employed in information system type work and a higher than average percentage employed in State and local government. The other employment sectors are comparable to the State of Arizona in terms of percentage of total labor force.

Bureau of Labor Statistics

September 2012	Lake Havasu City/Kingman Metropolitan Area	State of Arizona
Total Nonfarm Payroll Employment	46,000	2,474,600
Private Sector	37,500	2,049,100
Goods-Producing Industries	5,100	284,700
Service-Providing Industries	40,900	2,189,900
Private Service Providing	32,400	1,764,400
Mining and Construction	2,400	263,300
Manufacturing	2,700	152,000
Trade, Transportation and Utilities	10,400	480,900
Information	700	282,100
Financial Activities	1,600	170,300
Professional and Business Services	3,600	356,500
Education and health services	8,400	388,200
Leisure and Hospitality	5,700	265,800
Other Services (except Public Administration)	2,000	87,500
Government	8,500	425,500
Federal Government	500	56,200
State and Local Government	8,000	369,300

CONCLUSION

Kingman has a larger percentage of seniors than Arizona and the United States. Programs, services, and land use planning decisions should be made to accommodate a large senior population, plus to attract a younger population. Health care facilities, the need for facilities to have accessibility features and facilities that allow greater low-intensity physical exercise are considerations in land use planning. Community amenities to attract a younger population are also needed. More neighborhood parks and recreational facilities are needed. Safe sidewalks programs, particularly to known active destinations, are needed to link neighborhoods and the community.

Kingman will largely remain the same unless intervention takes place. Kingman is an identified retail center, therefore progress towards developing the two proposed interchanges on I-40 at Kingman Crossing and Rancho Santa Fe Parkway will provide greater opportunity for regional retail development.

Along with the income from retirees, Kingman's economy is based on manufacturing. Kingman is the manufacturing center of Mohave County and Kingman must enhance its workforce, along with create the infrastructure to sustain and attract manufacturers.

The development of post-secondary educational facilities is vitally important to retain young adults, increase the educational level of those in the current workforce and to attract educated people to locate in Kingman. The development of Mohave Community College; along with the further enhancement of the Northern Arizona University extension; plus Arizona State University in Lake Havasu City are all elements to further the educational upgrades needed in Kingman.

The private owned vehicle is important in Kingman and the surrounding area. Although the City of Kingman operates the Kingman Area Regional Transit (KART), the system is underfunded and infrequent to serve a significant portion of the workforce for commuting purposes and the citizenry for routine transportation needs. The transportation infrastructure continues to be developed to support private vehicles.

The large portion of the population is retired which identifies the need for greater health care facilities and skilled health care professionals. The Kingman Regional Medical Center's expansion is an important element of the community and essential part of the community's economy.

	Kingman	Mohave County	City/County Comparison	Arizona	City/State Comparison	USA	City/National Comparison
People QuickFacts							
Population, 2011 estimate	28,279	202,351	13.98%	6,482,505	0.44%	311,591,917	0.01%
Population, 2010 (April 1) estimates base	28,068	200,186	14.02%	6,392,013	0.44%	308,745,538	0.01%
Population, percent change, April 1, 2010 to July 1, 2011	0.8%	1.1%	72.73%	1.4%	57.14%	0.90%	88.89%
Population, 2010	28,068	200,186	14.02%	6,392,017	0.44%	308,745,538	0.01%
Persons under 5 years, percent, 2011	6.4%	5.3%	120.75%	6.9%	92.75%	6.50%	98.46%
Persons under 18 years, percent, 2011	23.3%	20.2%	115.35%	25.1%	92.83%	23.70%	98.31%
Persons 65 years and over, percent, 2011	19.1%	24.0%	79.58%	14.2%	134.51%	13.30%	143.61%
Female persons, percent, 2011	51.1%	49.9%	102.40%	50.3%	101.59%	50.80%	100.59%
Population Characteristics							
Racial and Ethnic							
White persons, percent, 2011 (a)	88.0%	92.5%	95.14%	84.6%	104.02%	78.10%	112.68%
Black persons, percent, 2011 (a)	1.0%	1.2%	83.33%	4.5%	22.22%	13.10%	7.63%
American Indian and Alaska Native persons, percent, 2011 (a)	1.7%	2.7%	62.96%	5.2%	32.69%	1.20%	141.67%
Asian persons, percent, 2011 (a)	1.7%	1.2%	141.67%	3.0%	56.67%	5.00%	34.00%
Native Hawaiian and Other Pacific Islander persons, percent, 2011 (a)	0.3%	0.2%	150.00%	0.3%	100.00%	0.20%	150.00%
Persons reporting two or more races, percent, 2011	3.1%	2.2%	140.91%	2.5%	124.00%	2.30%	134.78%
Persons of Hispanic or Latino Origin, percent, 2011 (b)	12.5%	15.2%	82.24%	30.1%	41.53%	16.70%	74.85%
White persons not Hispanic, percent, 2011	81.3%	79.0%	102.91%	57.4%	141.64%	63.40%	128.23%
Foreign born persons, percent, 2006-2010	5.2%	6.4%	81.25%	14.2%	36.62%	12.70%	40.94%
Language other than English spoken at home, pct age 5+, 2006-2010	8.3%	10.7%	77.57%	27.1%	30.63%	20.10%	41.29%

People QuickFacts	Kingman	Mohave County	City/County Comparison	Arizona	City/State Comparison	USA	City/ National Comparison
Education							
High school graduates, percent of persons age 25+, 2006-2010	86.6%	83.0%	104.34%	85.0%	101.88%	85.00%	101.88%
Bachelor's degree or higher, pct of persons age 25+, 2006-2010	15.4%	12.0%	128.33%	26.3%	58.56%	27.90%	55.20%
Mean travel time to work (minutes), workers age 16+, 2006-2010	15.2	19.4	78.35%	24.8	61.29%	25.2	60.32%
Housing Information							
Housing units, 2011	11,570	111,845	10.34%	2,864,335	0.40%	132,312,404	0.01%
Living in same house 1 year & over, 2006-2010	69.0%	79.3%	87.01%	79.8%	86.47%	84.20%	81.95%
Homeownership rate, 2006-2010	64.9%	71.5%	90.77%	67.4%	96.29%	66.60%	97.45%
Housing units in multi-unit structures, percent, 2006-2010	13.5%	9.8%	137.76%	20.7%	65.22%	25.90%	52.12%
Median value of owner-occupied housing units, 2006-2010	\$161,700	\$170,600	94.78%	\$215,000	75.21%	\$188,400	85.83%
Households, 2006-2010	10,622	80,361	13.22%	2,326,468	0.46%	114,235,996	0.01%
Persons per household, 2006-2010	2.52	2.44	103.28%	2.63	95.82%	2.59	97.30%
Per capita money income in past 12 months (2010 dollars) 2006-2010	\$22,353	\$21,523	103.86%	\$25,680	87.04%	\$27,334	81.78%
Median household income 2006-2010	\$43,849	\$39,785	110.21%	\$50,448	86.92%	\$51,914	84.46%
Persons below poverty level, percent, 2006-2010	13.2%	16.1%	81.99%	15.3%	86.27%	13.80%	95.65%
Employment Information							
Total number of firms, 2007	2,930	14,568	20.11%	491,529	0.60%	27,092,908	0.01%
Black-owned firms, percent, 2007	S	1.1%		2.0%		7.10%	
American Indian firms, percent, 2007	2.0%	2.6%	76.92%	1.9%	105.26%	0.90%	222.22%
Asian-owned firms, percent, 2007	S	1.6%		3.3%		5.70%	
Native Hawaiian & Other Pacific Islander-owned firms, percent, 2007	F	F		S		0.10%	
Hispanic-owned firms, percent, 2007	6.5%	4.6%	141.30%	10.7%	60.75%	8.30%	78.31%
Women-owned firms, percent, 2007	28.7%	25.9%	110.81%	28.1%	102.14%	28.80%	99.65%

People QuickFacts	Kingman	Mohave County	City/County Comparison	Arizona	City/State Comparison	USA	City/National Comparison
Economic Indicators							
Manufacturers shipments, 2007 (\$1000)	NA	1,349,965		57,977,827		5,338,306,501	
Merchant wholesaler sales, 2007 (\$1000)	136,902	423,845	32.30%	57,573,459	0.24%	4,174,286,516	0.00%
Retail sales, 2007 (\$1000)	993,640	2,837,691	35.02%	86,758,801	1.15%	3,917,663,456	0.03%
Retail sales per capita, 2007	\$36,218	\$14,489	249.97%	\$13,637	265.59%	\$12,990	278.81%
Accommodation and food services sales, 2007 (\$1000)	75,590	274,299	27.56%	13,268,514	0.57%	613,795,732	0.01%
Building permits, 2011	308	196	157.14%	13,007	2.37%	624,061	0.05%
Geography QuickFacts							
Land area in square miles, 2010	34.82	13,311.08	0.26%	113,594.08	0.03%	3,531,905.43	0.00%
Persons per square mile, 2010	806.1	15	5374.0%	56.3	1431.79%	87.4	922.31%

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

FN: Footnote on this item for this area in place of data

NA: Not available

D: Suppressed to avoid disclosure of confidential information

X: Not applicable

S: Suppressed; does not meet publication standards

Z: Value greater than zero but less than half unit of measure shown

F: Fewer than 100 firms

Source: US Census Bureau State & County QuickFacts

CHAPTER 3

TRANSPORTATION

The Kingman Area Transportation Study (KATS) was prepared in conjunction with the Arizona Department of Transportation and Mohave County. Much of the study is centered on the City of Kingman. Much of the emphasis of the KATS is on road improvement projects to permit private motor vehicles to circulate throughout the city easier. This approach appears to be the preferred the option over capital improvements to enhance mass transit and non-motorized transportation options. Convenience, safety and time-savings all favor expanding our road network to accommodate the private vehicles.

The Transportation Element Update is the Kingman Area Transportation Study. Attached at the end of this General Plan Update is the executive summary of the Kingman Area Transportation Study.

CHAPTER 3 TRANSPORT ACTION

The transport action is the process by which the energy of the incident wave is transferred to the medium. This is done by the interaction of the wave with the particles of the medium. The energy is transferred to the particles, which then transfer it to their neighbors, and so on. This process is called transport action.

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CHAPTER 4

LAND USE ELEMENT

INTRODUCTION

The *Land Use Element* is one of the elements required under the Arizona Revised Statutes. The following items are required to be addressed:

- A) Designate the proposed general distribution and location and extent of such uses of land for housing, business, industry, agriculture, recreation, education, public buildings and grounds, open space and other categories of public and private uses of land as may be appropriate to the municipality.
- B) Includes a statement of the standards of population density and building intensity recommended for the various land use categories covered by the plan.
- C) Identifies specific programs and policies that the municipality may use to promote infill or compact form development activity and locations where those development patterns should be encouraged.
- D) Includes consideration of air quality and access to incident solar energy for all general categories of land use.
- E) Includes policies that address maintaining a broad variety of land uses including the range of uses existing in the municipality when the plan is adopted, readopted or amended.
- F) Includes sources of currently identified aggregates from maps that are available from state agencies, policies to preserve currently identified aggregates sufficient for future development and policies to avoid incompatible land uses, except that this subdivision shall not be construed to affect any permitted underground storage facility or limit any person's right to obtain a permit for an underground storage facility pursuant to Arizona Revised Statute Title 45, chapter 3.1.

The *Land Use Element* specifically addresses items A and B in detail. The Goals, Objectives and Policies of the *Growth Area Element* and the *Environmental Planning Element* of the General Plan address items C and D, respectively. Item E is addressed in the *Code of Ordinances of the City of Kingman* Section 2-133 through 2-137. After researching the available maps from the Arizona Geological Survey, the one quarry in the southeastern portion of the planning area is only designated aggregate site. The current Projected Land Use Map has designated this site as an industrial area and therefore addresses Item F.

There are two other known quarry sites known in the planning area. One is located at the Rattlesnake Wash area north of I-40 and the other is located northwest of the Camelback area.

KINGMAN GENERAL PLAN 2030 PROJECTED LAND USE MAP

PURPOSE AND FUNCTION OF THE LAND USE MAP

The projected land uses, as indicated on the **Kingman General Plan 2030 Projected Land Use Map**, designate the proposed general distribution, location and extent of such uses of land as housing, business, industry, recreation, public uses, and open space. Densities and intensities of uses are also indicated on the map and are discussed within the *Land Use Element*.

The land use map and the *Land Use Element* both function as a guide for all implementation strategies for development including zoning. However, they do not have the effect of rezoning any property. The map gives an indication of the existing and possible future land uses within a given area. It indicates a range of residential densities, which already exist or may be possible in the future in a certain area. It also indicates the intensities of commercial and industrial uses, for both existing and future development. It is required under the Arizona Revised Statutes §9-462.01.F that when rezoning a particular property the rezone must be consistent with and “conform” to adopted General Plan.

However, a particular land use projection by the land use map does not automatically guarantee a specific zoning will be approved on a specific site. The Planning and Zoning Commission and the City Council can consider timing of the rezoning request in terms of available infrastructure and access when determining the proper zoning. The land use map is also not static in that it may be amended by the City Council when it determines that conditions warrant. However, the land use map should not be viewed as a super-layer of zoning subject to monthly revisions and changes.

LAND USE CATEGORIES

The **Kingman General Plan 2030 Projected Land Use Map** designates land uses within the General Plan Study Area as either **Residential, Commercial, Industrial, Public/Quasi-public or Parks/Open Space**.

Residential Land Uses are broken into five separate categories that are characterized in terms of density, and which specify a number range of dwelling units per acre (du/ac) as follows:

- Rural Density**– 1 dwelling unit per acre or less
- Low Density**– 1-2 dwelling units per acre
- Medium Density**– 3-8 dwelling units per acre
- Intermediate Density**– 9-16 dwelling units per acre
- High Density**– 17-28 dwelling units per acre

The density of housing is always a fundamental decision in city design. Public costs of services and private development costs that are transferred to the end-user, are closely linked with residential densities. Density provides a benchmark from which the amount and type of public services that must be furnished can be measured.

The overwhelming majority of housing stock in the City of Kingman comprises single family detached homes, while County areas within the plan area are mostly manufactured homes. Both areas have residential densities primarily within the Low and Medium Density spectrum. The residential land use categories on the map, however, do not indicate a specific dwelling type (i.e. single family detached,

single family attached, manufactured homes, mobile homes, apartments, duplexes, triplexes). The specific types of dwellings are determined by the uses permitted in each zoning district. However, the number of dwelling units per acre does give an indication of the type of residential development that may occur. For example Rural, Low and Medium Density Residential Areas are generally going to be characterized by single family homes that are either site-built or are manufactured. Intermediate and High Density Residential Areas are generally going to be characterized by duplexes, triplexes and larger apartment complexes, depending on the size of the individual property.

Commercial Land Uses are broken down into four categories that are characterized by service area and/or the nature of the goods and services provided. The land use categories do not indicate a specific existing or projected commercial zoning district. However, in general, Neighborhood Commercial uses will tend to correspond with less intensive land uses typically found in C-1 and some C-2 areas. While Community Commercial, Regional Commercial and Highway Service uses will tend to correspond with more intensive land uses found in certain C-2 and C-3 areas. The commercial land uses are as follows:

Neighborhood Commercial: These are low intensity commercial areas typically located near or within residential areas at “nodes” disbursed throughout various residentially designated areas at major crossroads. This land use category would provide for goods and services that fit into a residential environment without undue detriment to the character of the area. This would generally include offices and low-intensity small scale retail uses.

Community Commercial: These are mostly major retail/service uses serving the community at large that are generally buffered from residential uses. Community Commercial uses are found dispersed throughout the city along major roadways in order to manage projected increases in traffic flows. Development criteria for the Community Commercial land uses demand that property development standards insure compatibility with adjacent non-commercial land uses.

Regional Commercial: These are major commercial shopping areas that are designated at specific central locations along Stockton Hill Road and E. Andy Devine near the I-40 interchanges. Regional Commercial uses are designated in areas that are in or near adequate infrastructure and are accessible to a large population base in central Mohave County that would be necessary to support such commercial centers usually located along major arterials.

Highway Service Commercial: These commercial areas are generally located near the I-40 interchanges or along Andy Devine Avenue (Historic Route 66) and West Beale Street (Highway 93). Highway Service Commercial land uses provide for traveler oriented establishments such as: Truck stops, hotels, motels, and full-service automotive gas stations.

Industrial Land Uses provide for the development of industrial areas in suitable locations and are broken down into two categories:

Light Industrial: These areas will accommodate industrial business activities that are not offensive to nearby commercial and residential uses. Development of such designated lands would be limited to uses such as light manufacturing, assembly, research and development, wholesale distribution, construction, other types of low-intensity industrial activities.

Manufacturing Industrial: These areas are characterized by industrial businesses and uses having more intensive types of industrial processes such as mechanical and/or chemical processing, extractive uses, materials transfer, multiple-shift operations, and large structures.

Public/Quasi-Public land uses include public uses such as government buildings and properties, school sites, the Kingman Airport, and quasi-public uses such as major places of worship.

Parks/Open Space land uses include developed recreational areas such as public parks and golf courses, as well as lands that are held for, or identified for, recreational use or preservation. They can also include areas that are not likely to be developed due to topography. This may include hilltops and washes, for example.

NEIGHBORHOOD PLANNING AREAS

The **Kingman General Plan 2030 Projected Land Use Map** includes a study area of approximately 79 square miles. Within this study area are six geographic areas known as **Neighborhood Planning Areas or NPAs**. The boundaries of the NPAs follow various political and physical barriers such as major roads, section lines, and municipal boundaries as shown in **Figure 1** at the end of this chapter. The overall General Plan Study Area envelopes the City's water service boundary and includes several additional sections.

The purpose of dividing the study area into six NPAs is to allow for an opportunity to focus on a number of unique land use issues within each geographic area. The Neighborhood Planning Areas are as follows:

NPA 1: Historic Downtown /West Highway 93 represent approximately 8.5 square miles or about 11-percent of the entire study area and include land both inside and outside the city limits. This NPA is located in the southwest portion of the study area, and contains Downtown Kingman as well as areas west of I-40 along West Highway 93 (W. Beale Street). This NPA is characterized as being the historic residential and existing governmental center of Kingman with a growing boutique-style shopping area in the CBD and a highway-oriented commercial area west of I-40.

NPA 2: Hilltop/Country Club represents approximately three square miles or about four-percent of the study area and lies entirely within the city limits of Kingman. This NPA is located south of I-40, north and east of Downtown Kingman, and west of the BNSF railroad tracks. This NPA is characterized as a mixture of older affordable housing, and some newer infill residential neighborhoods, existing parks the City golf course and the County Fairgrounds, and a variety of retail commercial and office development. This NPA has the highest population density per square mile.

NPA 3: East Kingman/Hualapai Mountain Road represents 17 square miles or about 22-percent of the study area and includes parts of the City and a portion of Mohave County. This NPA is located south of I-40 and east of the BNSF railroad tracks. This NPA is characterized by a mixture of older, affordable housing and a rapidly expanding area of higher end residential development on large lots in the eastern and southern portions of the NPA. This NPA is the scenic corridor to Hualapai Mountains with opportunities for park development and open space preservation.

NPA 4: Centennial Park/Canyon Shadows represents approximately 11.5 square miles or about 15-percent of the study area and lies partly within the City and partly within Mohave County. This NPA is located north of I-40, south of NPA 6: Camelback/New Kingman Addition and west of the BNSF railroad tracks. This NPA is characterized as having rapidly developing commercial and medical areas, and a mixture of older affordable housing and higher end infill residential along with multiple family developments and parks.

NPA 5: Vista Bella/Kingman Airport represents approximately 16.5 square miles or 21-percent of the study area and lies partly within the City and partly within Mohave County. This NPA is located north of I-40, and east of the BNSF railroad tracks. This NPA is characterized as being the main area for industrial development in Kingman at the Airport Industrial Park, along with opportunities for significant residential expansion in the Vista Bella Master Plan area to the south, provided access and infrastructure improvements are made.

NPA 6: Camelback/New Kingman Addition represents approximately 22.5 square miles or 29-percent of the study area and lies partly within the City, but mostly within Mohave County. This NPA is located north of NPA 4: Centennial Park/Canyon Shadows and west of the BN&SF railroad tracks. This NPA is characterized as a mixture of older affordable site-built and manufactured homes with some newer developing neighborhoods with close access to the growing Mohave Community College.

SUMMARY OF LAND USE ISSUES BY NPA

A summary of the existing developed and undeveloped land acreages by Neighborhood Planning Area as of October, 2001 is provided in the following section. A detailed breakdown of the acreages as of October, 2001 in each land use category by section, township & range and by NPA is provided in the *Appendix* to the *Kingman General Plan 2020*. The *Appendix* also includes total zoning district acreages for the City of Kingman through December, 2002.

NPA 1: HISTORIC DOWNTOWN/WEST HIGHWAY 93

Within NPA #1, about 4,556 acres of land is currently either publicly or privately owned. The remaining land represents rights-of-way, drainage parcels, or other similar land that cannot be developed. Based upon a land use study completed in May 2013, the breakdown of developable land in this NPA, both within the City of Kingman and the portion within Mohave County, is shown to be relatively unchanged in the past 10-years and is shown in **Table 1**.

TABLE 1: DEVELOPABLE LAND IN NPA #1

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	1,643	695	2,338
UNDEVELOPED	1,223	995	2,218
TOTAL LAND ACREAGES	2,866	1,690	4,556

Major issues affecting future land development in NPA #1 include:

Rehabilitation and Possible Expansion of Residential Areas

NPA #1 contains some of the oldest housing stock within the Kingman General Plan Study Area, and new housing growth over the last several years has been relatively minor. It is likely that future residential development will mostly infill areas where water and sewer lines exist and/or extensions are possible. Major residential expansion into hillside areas where soil conditions are poor and costs of development are high due to lack of infrastructure does not seem very likely.

Type and Extent of Commercial Development

Downtown Kingman was once the central business district of the City until residential expansion began in the 1960s and 1970s in the Hilltop area. Within NPA #1 development that is west of I-40 on Highway 93 consists mostly of motels, gas stations and truck stops which are considered Highway Service Commercial. The original central business district appears to cater somewhat more to the local residential population, although tourists are being attracted to several redeveloped areas such as the Powerhouse and the Hotel Brunswick. Much of this area is considered Community Commercial. Since the early 1990s a Neighborhood Commercial area consisting of antique shops, florist shops and other uses in former residences, has developed along Beale Street east of Fifth Street. This area appears to attract both local customers and tourists. Commercial expansion is somewhat limited in NPA #1; however a portion of city-owned Section 15 could be developed for a hotel/resort conference center. There may be the opportunity for commercial redevelopment in the downtown area as well.

Governmental Uses in the Downtown Area

Kingman is the seat of government for Mohave County, and much of the central downtown area in NPA #1 is devoted to governmental uses at the State, County and Municipal levels. There are also two public schools, Palo Christi Elementary and Lee Williams High School Campus. All of these uses fall into the public/quasi-public land use category. The City continues to strive to promote downtown Kingman as a governmental center. The City purchased two downtown buildings in 2005 and 2008, but sold one since one of the buildings in 2013. Mohave County developed a governmental campus complex for a number of departments near the southeast corner of the I-40/Beale Street interchange. Several County facilities are already existed in the downtown area, such as the Juvenile Detention Facility, the Jail Annex at the old National Guard facility, and the Cerbat Justice Court. The Sheriff's Office was constructed at the County Complex site at I-40 and Beale Street in 2003. The County constructed a new detention facility south of its administration building in 2010. Public/Quasi-Public land uses are, therefore, prominent in NPA #1 and are so reflected on the projected land use map. The *Redevelopment and Public Facilities Element* addresses these issues in further detail regarding to NPA 1.

Open Space Preservation and Park Development

Within the western three sections of NPA #1 there is an extensive amount of land that has been indicated for open space preservation on the projected land use map due in part to the steep topography, drainage issues, poor soils, and a lack of access. The Cerbat Foothills Recreation Area (CFRA) includes all of Section 15 which is owned by the City of Kingman and is the site of Camp Beale's Springs. It also includes most of Sections 22 and 27, which include Bureau of Land Management lands as well as some private lands. The CFRA is designed to manage these publicly owned lands to serve as open space preserves, to protect watersheds and wildlife habitats, and provide recreational opportunities. Several multi-use trails that have been developed or are programmed for development by the City and the Bureau

of Land Management (BLM) are located in this area. In addition to areas being preserved, there are five existing City parks in NPA #1, the largest number of parks in any NPA.

NPA 2: HILLTOP/COUNTRY CLUB AND NPA 4: CENTENNIAL PARK/CANYON SHADOWS

Within NPA #2, about 1,533 acres of land is currently either publicly or privately owned compared to NPA #4 where about 7,070 acres of land is currently either publicly or privately owned. The remaining land in both neighborhoods represents rights-of-way, drainage parcels, or other similar land that cannot be developed. Based upon a land use study completed in October, 2001, the breakdown of developable land in each neighborhood area, both within the City of Kingman and the portions within Mohave County, is shown in Tables 2 & 3.

TABLE 2: DEVELOPABLE LAND IN NPA #2

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	1024	0	1025
UNDEVELOPED	509	0	509
TOTAL LAND ACREAGES	1,533	0	1,533

TABLE 3: DEVELOPABLE LAND IN NPA #4

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	1,900	1,800	3,700
UNDEVELOPED	1,756	1,614	3,370
TOTAL LAND ACREAGES	3,656	3,414	7,070

Major issues affecting future land development in NPAs #2 and #4 include:

Access and Circulation

NPA #2 and #4 are physically separated by I-40. There are three underpasses, one at Stockton Hill Road, one at Harrison and one at Andy Devine that allow traffic to pass between these two areas. The highest traffic volumes in the City generally occur near the I-40 interchanges. The presence of strip commercial, two shopping centers, and Walmart near I-40 and Stockton Hill, and K-Mart/Bashas' near I-40 and Andy Devine also adds to the traffic volumes in these areas. Another major traffic generator in NPA #4 is the Kingman Regional Medical complex and auxiliary health related facilities located northwest of the Stockton Hill Road/I-40 interchange.

Major improvements which widened Stockton Hill from two lanes to four lanes north of Gordon were completed by the City in the early 2000s. Plans to expand Stockton Hill Road to six-lanes from Detroit Avenue north to Gordon Avenue are planned but funding is not available. The expansion of Gordon Drive took place in 2013. Bank Street was expanded in 2006. Future development in NPA #2 and NPA #4 will be affected by how, when and where the City addresses methods to alleviate traffic congestion in these areas. The Kingman Area Transportation Study (KATS) 2011 update, which comprises the *Circulation* element, addresses solutions to many of these traffic issues.

Residential Development

NPA #2, located south of I-40, is currently the most densely populated portion of the City of Kingman. The current population density is slightly less than 2,000 persons per square mile while NPA #4 has about 500 persons per square mile. Both NPAs have experienced a great deal of residential infill, particularly in the “boom” era of 2003 to 2008. In NPA #2, the residential development almost completely filled in the Gates Avenue Improvement District west of Stockton Hill Road. In NPA #4, substantial residential growth has occurred in both City improvement districts such as Kingman Airport Tract north of Airway Avenue near Willow, as well as in new subdivisions such as Walleck Ranch north of Kino. Also in NPA #4, some high density residential development has occurred along Harrison Drive and Rutherford in the form of new apartments.

Major additional residential growth is not anticipated in NPA #2 due to the fact that much of this area is already infilled. However, there is still substantial room for additional residential development in NPA #4 especially if intermediate and high density residential growth occurs within a core area between Airway, Beverly, the Mohave Wash and Rutherford Street. The City formed an improvement district in the area north of Airway Avenue and south of Kino Avenue, east of Willow and west of Roosevelt. Some development has taken place, but this area largely sits vacant

Extent and Intensity of Commercial Development

NPA #4 north of I-40, can be considered the current commercial hub of Kingman and will likely continue to serve this purpose for at least the next 20 years. Commercial development over the last 10 years has gradually expanded northward along Stockton Hill Road and along Airway Avenue. Walmart constructed a superstore east of Stockton Hill Road at Sycamore Avenue. Home Depot and a new shopping center with a Safeway store have been constructed along Stockton Hill Road between Kino Avenue and Gordon Drive has been constructed. Medical related facilities and a 97,000 square foot senior living complex have developed along Western Avenue and Airway Avenue. Commercial expansion in these areas is likely to continue. There may be additional Neighborhood and Community Commercial Development along Western Avenue, Bank Street and Gordon Drive, and the plan has taken these issues into consideration. The Kingman Regional Medical Center continues to expand throughout the City.

NPA #2 has also experienced new commercial growth during the last several years, mainly along Stockton Hill Road. Much of the development has been in the form of new small scale office and retail uses, along with several conversions of residential homes along Stockton Hill Road into office uses. A major issue in NPA #2 will likely continue to be pressure for additional commercial development near the residential interface along Stockton Hill Road.

Open Space Preservation and Park Development

Within the west portion of NPA #4 there is an extensive amount of land that has been set aside for open space preservation. This area includes portions of the CFRA on land owned by the City of Kingman and BLM. Other areas identified for open space on the land use map include portions of State Trust Sections 2 and 36 and Section 35, under BLM control. Much of these lands have steep topography, poor soils, and

a lack of access, lack of infrastructure, all of which makes these areas difficult to develop. In addition to areas being preserved, there are two neighborhood parks, with a third neighborhood park programmed in NPA #4 in 2014. A fourth park is planned in the Shangri-La area, however, a specific location is not identified and lack of funding has been a major obstacle to pursuing new park development. Trail improvements will occur along the Mohave Wash, which will add to the recreational opportunities in this area.

Within the Hilltop/Country Club NPA #2, there are two existing neighborhood parks and the Cerbat Cliffs Municipal Golf Course. In addition, the City has acquired about 100 acres of hillside land just south of the golf course for the White Cliffs Preserve which includes the White Cliffs Wagon Trail historic site. This area is also identified for open space preservation and possible recreational development in the future. A 5-10 acre neighborhood park is also programmed in 5-10 years near the golf course. However, no specific location has yet been identified.

NPA 3: EAST KINGMAN/HUALAPAI MOUNTAIN ROAD

Within NPA #3 is about 10,587 acres. This area is one of the most significant areas of growth. Development in this area has largely been higher valued single-family residential development. The historically platted vacant area in the western portion of NPA#3 has infilled with newer moderately priced single-family residential development. Plats have been approved for larger lot development in the eastern portion of NPA#3. Based upon a land use study completed in May 2013, the breakdown of developable land in this neighborhood area, both within the City limits of Kingman and the portion within Mohave County, is shown in **Table 4**.

TABLE 4: DEVELOPABLE LAND IN NPA #3

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	1,450	218	1,668
UNDEVELOPED	3,872	5,047	8,919
TOTAL LAND ACREAGES	5,322	5,265	10,587

Major issues affecting future land development in NPA #3 includes:

Access and Circulation

NPA #3 is physically separated by both I-40 and the railroad tracks from the rest of Kingman. The only access into this area is by way of the Hualapai Mountain Road bridge over the railroad tracks and by traveling on Eastern Avenue to Airway Avenue, via Kenwood Avenue to Yavapai Drive. Two traffic interchanges on I-40 at Kingman Crossing and Rancho Santa Fe Parkway are planned, but funding has not been secured for either interchange. The Kingman Crossing traffic interchange is an interchange that initially provides access only to the north. This interchange will access approximately 175 acres of future retail space and hospital. The Rancho Santa Fe Parkway traffic interchange will provide access to the Rancho Santa Fe residential development to the south of I-40, which has some planned retail development areas, and access north of the Kingman Airport area.

In 2006, the surface railroad crossing at Louise Avenue was closed when the Airway Underpass was completed. At the same time, this neighborhood area has seen perhaps the greatest population increase within the City of Kingman since the last plan was adopted in 2003. Commercial development on Hualapai Mountain Road has also started to occur over the last several years as well.

Residential Development and Densities

NPA #3, as mentioned, has experienced a significant amount of mostly residential growth over the last 10 years. The Rancho Santa Fe area was first developed with over 400 new single family homes. Other major new residential developments have included the Hualapai Mountain Ranch/Fripps Ranch development, Boulder Springs, Canyon Bluffs, Granite Bluffs, Southern Vista, Hualapai Shadows and Hualapai Foothills Estates. Significant infill has occurred in Kingman Park Estates, Kingman Air-Rail Manor, and Golden Gate Addition. Additional infill can be expected upon completion of the East Golden Gate Improvement District.

This growth has not occurred without some controversy. In 1997 there were two referenda on the rezoning of property along Southern Avenue. This was spurred by the opposition of many residents to higher residential densities in the area that could have occurred under the approved zoning. At the same time, development costs for water, sewer, underground utilities, and street improvements have continued to rise, making the cost per lot to develop larger lot subdivisions increasingly expensive. Despite these controversies, it is expected that NPA #3 will be a primary area of residential development due to large amounts of available land and the proximity to infrastructure.

Perhaps the single biggest unknown in NPA #3 in terms of future residential development is what will happen on State Trust Section 16. At the present time there is no adopted state plan for Section 16, however, this land is now surrounded on three sides by half acre and one acre residential development. A sewer trunk line has been extended across the northern boundary of Section 16 in order to serve future areas of Rancho Santa Fe. In 2006, a master plan was developed and the Arizona Land Department held an auction to sell Section 16. The proposed developer did not bid on the project and no plans to sell this section of land have been proposed. The location of the sewer line makes it more likely that Section 16, once sold by the State, will develop with residences on lots smaller than what has previously occurred in the surrounding areas. This is due to the high costs per lot of extending sewer lines in larger lot subdivisions. Although the land use map does indicate Rural Density Residential 1 unit or less per acre and Low Density Residential, 1-2 units per acre for Section 16, it is certainly possible that should the section be sold there will be future requests to change the land use scenario in the area. It seems unlikely that a square mile entirely consisting of ½ acre and greater than one-acre lots will occur in Section 16, due to the increasing costs of development for such large lots.

Extent and Intensity of Commercial Development

The City owns 168-acres located directly south of the proposed Kingman Crossing Interchange. The property is currently designated as Parks/Open Space. In 2006, the City approved a major General Plan amendment to designate this area as Regional Commercial. A referendum on the resolution that adopted this General Plan Amendment was overturned by the electorate in 2007.

There is a neighborhood commercial area at Eastern Avenue and Southern Avenue that has a potential for greater commercial development. The property owner sought to intensify the zoning classification from Commercial: Neighborhood Convenience (C-1) to Commercial: Community Business (C-2) in 2008. This rezoning request resulted in a Planned Development District, but the commercial buildings have been vacant and vandalized.

There has been some commercial development within NPA #3 along Hualapai Mountain Road, but over 40-acres of commercially zoned property is vacant. Medical facilities have been constructed. Kingman Regional Medical Center constructed a medical office building in 2012 and the Veterans Administration is constructing a clinic in 2013. Hualapai Mountain Road has a design review overlay district corridor to assure a southwestern architecture and greater landscaping.

The second major Community Commercial area in NPA #3 is projected at the proposed I-40 at the Rancho Santa Fe Parkway interchange. It should be noted, however, that future commercial development of this site would be dependent on the completion of the interchange and at least a portion of the parkway, not to mention extensive infrastructure expansion.

Siting of Public and Quasi-Public Uses

As NPA #3 continues to grow, the ability to site public and quasi-public uses will be of increasing importance. The siting of schools and places of worship can be controversial at times, especially in or near residential neighborhoods. This is due to concerns such as increased traffic, safety issues, and impacts on property values. As a result, the land use plan considers multiple locations for such future public/quasi-public uses to serve the needs of future residents.

Open Space Preservation and Park Development

Within the southeastern and southwestern portion of NPA #3, there is an extensive amount of land, mostly under the U.S. Bureau of Land Management's jurisdiction that has been indicated for open space preservation on the land use map. Much of this land has steep topography, poor soils, a lack of access, and lack of infrastructure, which would make them difficult to develop should a land trade occur. In addition to areas being preserved, there is one existing City neighborhood park, one play lot in a drainage basin, and one neighborhood park programmed in NPA #3 in the next 3-5 years. A community park is planned in the next 5-10 years, which is identified within City-owned property on Section 9.

NPA 5: VISTA BELLA/KINGMAN AIRPORT AND NPA 6: CAMELBACK/NEW KINGMAN ADDITION

Within NPA #5 is about 10,048 acres. NPA #6 is about 13,741 acres. Based upon a land use study completed in May 2013, the breakdown of developable land in these neighborhood areas, both within the City limits of Kingman and the portion within Mohave County, are shown in **Tables 5 and 6**. The City has annexed over 2600 acres in NPA #5 and 1680-acres in NPA #6 since 2003 and an area plan needs to be developed to this area.

The breakdown between City and County land acreages also takes into account the December, 2002 annexation of 1,040 acres in Section 24, T.22N., R.17W. and part of Section 19, T.22N., R.16W. by the City of Kingman in NPA #6.

TABLE 5: DEVELOPABLE LAND IN NPA #5

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	375	2,850	3,225
UNDEVELOPED	5,228	1,595	6,823
TOTAL LAND ACREAGES	5,603	4,445	10,048

TABLE 6: DEVELOPABLE LAND IN NPA #6

DEVELOPABLE LAND AREA	ACREAGE WITHIN CITY	ACREAGE WITHIN COUNTY	TOTAL LAND ACREAGES
DEVELOPED	275	4,005	4,280
UNDEVELOPED	1,353	7,838	9,191
TOTAL LAND ACREAGES	1,628	11,843	13,471

Major issues affecting future land development in NPAs #5 and #6 include:

Access and Circulation

NPA #5 is physically separated by I-40 and the BN & SF Railroad tracks from areas to the south and west. At present, there are only two roads into this area. The first is Eastern Street, which is accessible by way of an underpass at I-40. The other access is the Airway Avenue Underpass. An unimproved road linking this area to the Kingman Airport area, which has an underpass at Mohave Airport Drive which connects to the Kingman Airport Industrial Park to Route 66 is a third access. The property owners in this area form an improvement district to fund the Airway Avenue Underpass.

As was discussed in NPA #3, the proposed Rancho Santa Fe Parkway linking the east side of Kingman with the Airport, I-40 and Hualapai Mountain Road is indicated on the projected land use map. The parkway is proposed to continue northward from I-40 just east of the Vista Bella Master Plan area and connect into the Kingman Airport Industrial Park. However, the interchange proponents are seeking funding from the State of Arizona and the City of Kingman. Although the interchange has been designed to a 95-percent stage, there is no funding commitment from either funding source. A secondary access into the Kingman Industrial Park from the DW Ranch Road exit at I-40, just east of the Kingman General Plan 2020 study area, is also indicated. Finally, an underpass at Airway Avenue and the railroad tracks is shown as has been proposed.

In addition, a frontage road paralleling I-40 has been proposed by a number of local land owners that would extend from the I-40/DW Ranch Road interchange east of the General Plan study area, past a possible future Rancho Santa Fe Parkway interchange and connecting with Airway Avenue at Santa Rosa Boulevard. This road could serve as an alternative route to commercial and industrial areas moving traffic away from any future residential development in the Vista Bella area.

The proposed Kingman Crossing Boulevard traffic interchange will provide another access to the NPA#5. This interchange will be at milepost 55 with Kingman Crossing Boulevard as the cross street with I-40. Initially the interchange will only provide access to the north (NPA#5), but a change of access report is underway for permit access to the south of I-40. The City is petitioning the Arizona State Land Department for right-of-way access along the east side of Section 16.

Within NPA #6, a number of roadway improvements are recommended by the KATS study, which is reflected on the projected land use plan. A parkway corridor, known as the Grace Neal Parkway, is proposed across the northern portion of NPA #6. This roadway could potentially open the area up to new residential and commercial development. This parkway would also provide essentially a loop-route bypass around the northern and eastern sides of Kingman with a connection through the Kingman Airport Industrial Park to the parkway in NPA #5 and the future I-40 interchange.

Residential Development Potential and Possible Limitations

NPA #5 is currently the least populated NPA in the Kingman General Plan Study Area. Residential development is mostly confined to the Greater Kingman Addition Improvement District area, and The Villas and Valle del Sole subdivisions, which are part of the Vista Bella development. Vista Bella has a revised master plan, which includes Section 3 and portions of 4 and 10 that was approved in 2002 with hard zoning. This master plan includes a 9 hole and 18 hole golf course with residential, commercial and industrial land uses, which are reflected on the projected land use map. This master plan area has been altered by the selling of the southwest portion of the property to the Kingman Unified School District for the placement of two schools.

The future development of Vista Bella as well as other residential areas of NPA #5 will depend on a number of factors, but most importantly it will depend on extensive infrastructure expansion including major road improvements and the extension of water and sewer lines.

NPA #6, which primarily lies outside the City limits, is the largest NPA in the Kingman General Plan Study Area at about 22 square miles. It also has the highest population of any NPA at 15,101, with an overall density of approximately 700 persons per square mile. Population growth in this area has been somewhat slower than the City of Kingman. Average annual growth rates in the City over the last 40 years have been 4.5-percent. The average annual growth rate in the New Kingman/Butler CDP, which includes NPA #6 has been 2.7-percent over for the same period.

Most of the population lies south of Jagerson in the New Kingman Addition, Chaparral Mesa, and College Heights subdivisions. This area is developed with lot sizes mostly less than 8,000 square feet in size. A significant number of residences are either manufactured homes or older mobile homes. Also, much of this area is presently on individual septic systems except some newer areas, such as Chaparral Mesa. The ability to extend and the timing of the extension of infrastructure such as water and sewer will largely guide where, when and what type of new residential development will occur in this area. Although much of this NPA lies outside the City limits, it still mostly lies within the City's water service area. Because of requests for water service in unsubdivided areas and for new subdivisions, the City could play a significant role in guiding the location and type of residential development in NPA #6. Ultimately, much of NPA #6 may eventually be annexed by the City, which would allow much more direct control by the City over when, where and what type of development occurs in this area.

Extent and Intensity of Commercial Development

NPA #5 is completely devoid of any existing commercial development. However, there is a significant amount of land on the projected land use map that is designated for future Community Commercial and Light Industrial development. NPA #5 has approximately four miles of undeveloped freeway frontage, some of which could be prime for future commercial and industrial development should the access and infrastructure problems be solved. In fact, this type of development would be dependent on the completion of the interchange with I-40 and the proposed parkway and/or the construction of the Airway underpass. Neither project is programmed yet.

In NPA #6, most of the existing commercial development is along Northern and Bank Streets, with some limited commercial areas along Highway 66. The largest single area for new commercial development nearest a population center would be in Section 29 and in State Trust Section 32 between Bank and Castle Rock along Northern. Additional commercial development will likely be needed if and when the population increases and moves north.

Kingman Airport and Industrial Park

The Kingman Airport, located in NPA #5, was originally built by the U.S. military during World War II. It later became a County airport and is now under the City's jurisdiction, although it remains outside the Kingman city limits. The airfield operations area is designated as Public/Quasi-Public on the projected land use map. Areas that have been approved by the City for industrial development have been indicated as Manufacturing Industrial. Heavier industrial development requiring large parcels of land, have traditionally found that the Kingman Industrial Park to be an appropriate location. This trend will likely continue. However, roadway connections between the Airport and I-40 could open up areas south of the Airport for manufacturing and light industrial development as well. The airport and the industrial park have an important impact on the economy of Kingman by providing opportunities for current and future businesses and job growth. In other cities, a number of airports have found themselves in the center of controversy from residents upset with aircraft noise, even when the airport was there long before residential development encroached. Therefore, projected areas for residential development have been shown in areas that are not directly in the path of aircraft overflights.

The Development Future of State Trust and BLM Lands

Within NPA #5 there are two areas of State Trust land. One is Section 2, T21N, R16W, and the other is the east half of Section 24, T22N, R16W. There are also Bureau of Land Management lands in a portion of Section 13, T21N, R16W. Within NPA #6, there are five State Trust sections including Sections 16, 18, the north half of 20 and most of Section 32 in T22N, R16W, as well as Section 24, T22N, R17W. There is also one BLM section, Section 26, T22N, R17W. At present, the only state section that has an adopted land use plan by the state is Section 32. All of the State Trust sections lie within the City water service boundary and could be developed in the future. Section 32 is centrally located in NPA #6 and contains a mixture of land uses including commercial, residential and parks/open space in accord with the approved State plan. Likewise, Section 2 in NPA #5, is in a good location for future development with its proximity to the airport. Development within this section could include a variety of industrial, commercial and residential uses as shown in the projected land use plan. Within the two BLM sections, development is also possible in the future. However, it should be noted that Section 26 in NPA #6 is quite mountainous, lies outside the City water service boundary, lies higher than the City water tank in the Camelback neighborhood, and therefore, is above any current water pressure zones. Therefore, this section is projected for open space preservation on the projected land use map.

POPULATION GROWTH

2010 CENSUS POPULATION FIGURES

The City of Kingman and the surrounding areas within the Kingman General Plan Study Area have experienced steady, sustained growth since the last Kingman General Plan was adopted in 2003. In 1990, the population within the City of Kingman was 13,769, and by the year 2000 the population had risen to **20,069**; an average annual increase of **3.84**. The 2010 census for Kingman was **28,068**, an annual growth rate of **3.41-percent** for this 10-year period and with the 2012 population estimate of **28,335**. Over the previous 30 year period, the average growth rate was **2.44-percent**. The New Kingman/Butler CDP, which includes much of the area north of Kingman that lies within the General Plan Study area, had a population of 11,627 in 1990. This population rose to **14,810** in 2000; an average annual increase of **2.45-percent**. In 2010, this area had a population of **22,764**. The entire General Plan Study Area is, therefore, estimated to have had a population in the year 2010 of **62,236**. This would mean the Study Area as a whole experienced about a **5.78-percent** annual population growth between 2000 and 2010. **Table 7** indicates the estimated population breakdown by Neighborhood Planning Area.

TABLE 7: 2010 CENSUS FIGURES BY NPA

NEIGHBORHOOD PLANNING AREA	POPULATION WITHIN CITY	POPULATION WITHIN COUNTY	TOTAL POPULATION BY NPA
#1 Historic Downtown/ W. Hwy 93	2,690	94	2,784
#2 Hilltop/Country Club	6,261	0	6,261
#3 East Kingman/ Hualapai Mountain Rd	8,369	7,512	15,881
#4 Centennial Park/ Canyon Shadows	5,080	845	5,925
#5 Kingman Airport/ Vista Bella	3,552	2,333	5,885
#6 Camelback/New Kingman Addition	2,116	23,384	25,500
TOTAL POPULATION BY JURISDICTION	28,068	34,168	62,236

POPULATION PROJECTIONS

Population projections for the Kingman General Plan Study Area and the City of Kingman alone have been made for a period of twenty years (2010-2030). The annual population growth rate from 2000 to

2010 was 5.8-percent. However, this growth rate has not been experienced since 2010. Three different growth rates have been utilized:

- Slow growth at 2% per year.
- Existing moderate growth at 4% per year.
- Boom growth at 6% per year.

Each scenario is projected at a constant rate per year through the twenty year time frame. Population projections can be helpful in planning for and determining the timing and development of services, infrastructure and other public facilities. **Table 8** indicates the growth rate scenarios for the entire study area. **Table 9** indicates the growth rate for the City of Kingman only.

TABLE 8: POPULATION PROJECTIONS FOR KINGMAN GENERAL PLAN STUDY AREA

YEAR	2% INCREASE PER YEAR	4% INCREASE PER YEAR	6% INCREASE PER YEAR
2010	62,236	62,236	62,236
2015	68,714	75,720	83,286
2020	75,865	92,124	111,456
2025	83,761	112,084	149,152
2030	92,479	136,367	199,599
OVERALL INCREASE	30,243	74,131	137,363

TABLE 9: POPULATION PROJECTIONS FOR THE CITY OF KINGMAN

YEAR	2% INCREASE PER YEAR	4% INCREASE PER YEAR	6% INCREASE PER YEAR
2010	28,068	28,068	28,068
2015	30,989	34,149	37,561
2020	34,215	41,548	50,266
2025	37,776	50,549	67,267
2030	41,708	61,500	90,018
OVERALL INCREASE	13,640	33,432	61,950

Population increases for the Kingman General Plan Study Area range from a low of 92,479 people (2% growth rate) to a high of 137,363 people (6% growth rate) at the end of the 20 year period.

Projected increases for the City of Kingman at the end of the same time period range from 13,640 people (2% growth rate) to a high of 61,950 (6% growth rate). It should be noted that no assumptions have been made as to how the population growth rate may be affected should the City annex any populated areas during the next 20 years.

Even though the area experienced a 5.78-percent growth rate from 2000 to 2010, the current population estimates show a much lower growth rate. A two-percent annual growth rate for the area is most likely. Therefore, an increase of 30,243 for the area and 13,640 for the City is expected over the next 20-years.

LAND USE PROJECTIONS

ACHIEVING AN IDEAL BALANCE OF LAND USES

There is a variety of thought as to the ideal balance of land uses within an urbanized area. One source, *The Small Town Planning Handbook*, suggests that approximately 30-40-percent of land within a town should be zoned residential, rights-of-way should occupy about 20-percent; public/quasi-public uses should occupy 5-15-percent; Commercial uses should represent 5-percent; Industrial should be 5-15-percent; Agriculture and open space should be 10-30-percent.

As of June 2013, the City of Kingman was approximately 36.47 square miles or 23,340-acres. Approximately about 57-percent of the land (15,691-acres) within the City was zoned residential; 9-percent was devoted to various rights-of-way; 10-percent (2234 acres) was zoned commercial; two-percent (553 acres) was zoned industrial; and 12-percent (2890- acres) zoned recreational open space.

Based upon the above figures it would appear that no additional acreage in the City limits should be designated on the general plan such that it could be zoned residential or commercial according to the recommendations of *The Small Town Planning Handbook*. This suggests between 4%-14% (805-2,689 acres) of more land could be designed for industrial zoning; and 0%-14% (0-2,602 acres) of land could be designated for open space zoning.

However, to get a more accurate picture of the residential, right-of-way, public-quasi-public, commercial, industrial, open space land use needs as opposed to the amount of zoned areas, it would first be important to determine the amount of the existing land devoted to these types of uses within the entire General Plan Study Area. The Kingman General Plan 2030 Study area is about 79 square miles or 50,560 acres in size. **Table 10** indicates the breakdown of existing land uses as of June, 2013 when a land use survey was completed.

TABLE 10: EXISTING LAND USES IN KINGMAN GENERAL PLAN 2030 STUDY AREA

LAND USE CATEGORY	ACRES	% OF TOTAL AREA
Residential	15,336	30.4%
Commercial	900	1.8%
Industrial	750	1.5%
Public/Quasi-Public	3,092	6.1%
Parks/Open Space	3,152	6.2%
Rights-of-way, etc.	3,294	6.5%
Vacant	24036	47.5%
TOTAL GENERAL PLAN STUDY AREA	50,560	100%

The next step is to determine a balance of residential land uses to provide for future population growth with commercial, industrial, public/quasi-public, and parks/open space areas that would be supported by future population.

RESIDENTIAL LAND USE PROJECTIONS AND MAXIMUM POTENTIAL POPULATION

A method used to estimate the ultimate population growth within a given area, as opposed to a population projection based upon possible growth rates, is a maximum potential population calculation. This calculation is determined by taking the projected acreages of each residential land use category (rural, low, medium, intermediate, and high density), as proposed in the projected land use map, and multiplying this figure by the maximum number of units allowable in each category. This figure is then multiplied by 2.5, which is the average household size in the City of Kingman based upon the 2010 census figures. The resulting figure is the maximum potential population for each residential land use category. These figures may be added together for a total population figure for each NPA and ultimately for the entire study area.

It should be emphasized, however, that the maximum potential population numbers are exaggerated. This is because we do account for undeveloped property that may not be capable of being developed residentially due to topographic issues, or the need to use land for roads, rights-of-way, drainage parcels and other non-residential purposes. In all likelihood, even at full build-out in each NPA, the overall population numbers will be significantly smaller.

Table 11 indicates the acreages of each residential land use category and maximum potential population and maximum densities for each NPA and for the entire Kingman General Plan 2030 Study Area.

TABLE 11: RESIDENTIAL LAND USE ACREAGE PROJECTIONS BY NPA AND MAXIMUM POTENTIAL POPULATION AND DENSITIES

LAND USE CATEGORY	NPA 1	NPA 2	NPA 3	NPA 4	NPA 5	NPA 6	TOTAL
Rural Density (1 du or less per acre)	1660	138	2453	2036	299	2739	9325
Low Density (1-2 du/ac)	4	4	2822	281	630	3785	7526
Medium Density (3-8 du/ac)	532	526	1462	755	2637	4100	10,012
Intermediate Density (9-16 du/ac)	108	49	50	180	109	180	676
High Density (17-28 du/ac)	5	30	0	66	8	0	109
TOTAL RESIDENTIAL ACREAGE	2309	747	6787	3318	3683	10,804	27,648
Residential Uses as a Percentage of Total Area	51%	49%	64%	47%	37%	80%	55%
Max Potential Population	19,246	14,767	51,640	33,015	60,819	113,593	293,080
Max. Potential Population Density per square mile	2703	6153	3122	2988	3874	5396	3710

The projected residential land uses represent **27,648 acres** or **55%** of the land area within the Kingman General Plan 2030 Study Area. As a percentage of all land uses within the study area, the residential land use categories somewhat exceed the 30%-40% area recommendation of the *Small Town Planning Handbook*. However, Kingman has traditionally developed in a rather low density manner with large lots that exceed a half an acre in many areas. As a result, the plan devotes a majority of the projected land uses to future residential development. NPA #3 and NPA #6 are projected in the plan as the most heavily residential areas due to their locations on the periphery of the study area. NPA #5 has the least area devoted to residential development due to its inclusion of the Kingman Airport Industrial Park.

The maximum potential population for the entire study area calculates to **293,080** with a maximum density of **3,710 persons per square mile**. Population densities would be highest in NPA #2, which already has the highest densities in the study area, and in NPA #6 due to its emphasis on residential land use.

However, once again it should be emphasized that the maximum potential population figures and densities are only used to determine a population ceiling that would be theoretically possible given a particular residential land use scenario. There is no attempt to estimate when the build-out of any NPA will occur. However, it is reasonable to assume that build-out will not occur in any NPA within the 10 year time frame of the general plan. In fact, even at the current growth rate of 4% per year, it would take over 50 years for the entire study area to reach the maximum potential population. It is also unlikely that the densities projected here will ever be achieved. At present, the densest population per square mile in the Study Area is in NPA 2 at approximately **2,000 persons per square mile**. Projecting this density

over the entire 79 square mile study area would result in a maximum population of **158,000**, or slightly more than half as much as is calculated using a maximum potential population projection.

NON-RESIDENTIAL LAND USE PROJECTIONS AND MAXIMUM POTENTIAL POPULATION RATIOS

In order to determine a balance of non-residential land uses needed to support future residential growth, we have designated certain percentages of the land in the General Plan Study Area for commercial, industrial and public/quasi-public, and park/open space uses. In addition, calculations have been made to determine the ratio of non-residential land uses to the maximum potential population in each NPA and in the study area as a whole. These ratios are important in helping determine the amount of commercial land that may be needed to provide goods and services and provide employment to a given population in a given geographic area. This is similar to Level of Service (LOS) standards, which provide a benchmark for a community to use in determining service demands and needs. LOS standards have been used to determine park and open space needs in the General Plan.

Tables 12 through 15 indicate the area of each non-residential land use category in each NPA, and a ratio of the acreage per 1,000 persons based upon maximum potential population.

Table 12	Table 13	Table 14	Table 15
Commercial	Industrial	Public/Quasi-Public	Park/Open Space
Acres	Acres	Acres	Acres
Ratio per 1,000 persons			

TABLE 12: COMMERCIAL LAND USE ACREAGE PROJECTIONS BY NPA AND RATIO OF ACREAGE TO MAXIMUM POTENTIAL POPULATION

LAND USE CATEGORY	NPA 1	NPA 2	NPA 3	NPA 4	NPA 5	NPA 6	TOTAL
Neighborhood	15	120	71	56	97	319	678
Community	86	47	233	569	258	511	1,704
Regional	0	10	0	149	0	0	159
Highway Service	83	54	0	33	0	0	170
TOT. COMMERCIAL AC.	184	231	304	807	355	830	2,711
Percent of Total area	4%	15%	3%	11%	4%	6%	5%
Ratio of Commercial Acreage per 1,000 persons at maximum population level	10 ac per 1,000	16 ac per 1,000	6 ac per 1,000	24 ac per 1,000	6 ac per 1,000	7 ac per 1,000	9 ac per 1,000

The projected commercial land uses represent **2,711 acres** or **five-percent** of the land area within the Kingman General Plan Study Area. As a percentage of all land uses within the study area, the commercial land use categories meet the five-percent recommendation of the *Small Town Planning Handbook*. At full build-out at the maximum potential population level, there will be **nine-acres of commercial land for every 1,000 persons**. As a percentage of land area, NPA 2 and NPA 4 have the largest amount of land projected for commercial development, as these areas include the main commercial growth corridors along Stockton Hill, E. Andy Devine and Airway Avenue.

TABLE 13: INDUSTRIAL LAND USE ACREAGE PROJECTIONS BY NPA AND RATIO OF ACREAGE TO MAXIMUM POTENTIAL POPULATION

LAND USE CATEGORY	NPA 1	NPA 2	NPA 3	NPA 4	NPA 5	NPA 6	TOTAL
Light Industrial	17	10	59	105	983	423	1,597
Manufacturing Ind.	0	0	0	40	2,918	0	2,958
TOTAL INDUSTRIAL ACREAGE	17	10	59	145	3,901	423	4,555
Percent of Total Area	0.3%	0.7%	0.6%	2.1%	38.8%	3.1%	9%
Ratio of Industrial Acreage per 1,000 persons at maximum population level	1 ac per 1,000	1 ac per 1,000	1 ac per 1,000	4 ac per 1,000	64 ac per 1,000	4 ac per 1,000	15 ac per 1,000

The projected industrial land uses represent **4,555 acres** or **nine-percent** of the land area within the Kingman General Plan Study Area. As a percentage of all land uses within the study area, the industrial land use categories are within the 5-15-percent recommendation of the *Small Town Planning Handbook*. At full build-out at the maximum potential population level, there will be **15-acres of industrial land for every 1,000 persons**. As a percentage of land area, NPA 5 has by far the largest amount of land projected for industrial development, as this area includes the Kingman Airport Industrial Park where most of the future industrial development in the study area is projected to occur.

TABLE 14: PUBLIC/QUASI-PUBLIC LAND USE ACREAGE PROJECTIONS BY NPA AND RATIO OF ACREAGE TO MAXIMUM POTENTIAL POPULATION

LAND USE CATEGORY	NPA 1	NPA 2	NPA 3	NPA 4	NPA 5	NPA 6	TOTAL
TOTAL PUBLIC/QUASI-PUBLIC ACREAGE	135	191	77	176	1,694	432	2,705
Percent of Total Area	3%	12.5%	1%	2.5%	16.8%	3.2%	5%
Ratio of Public/Quasi-Public Acreage per 1,000 persons at max. population level	7 ac per 1,000	13 ac per 1,000	2 ac per 1,000	5 ac per 1,000	28 ac per 1,000	4 ac per 1,000	9 ac per 1,000

The projected public/quasi-public land uses represent **2,705 acres** or **5-percent** of the land area within the Kingman General Plan Study Area. As a percentage of all land uses within the study area, the public/quasi-public land use category is within the 5-15-percent recommendation of the *Small Town Planning Handbook*. At full build-out at the maximum potential population level, there will be **nine-acres of public/quasi-public land for every 1,000 persons**. As a percentage of land area, NPA 5 has by far the largest amount of land projected for public/quasi-public development, due to the presence of the Kingman Airport.

TABLE 15: PARKS/OPEN SPACE LAND USE ACREAGE PROJECTIONS BY NPA AND RATIO OF ACREAGE TO MAXIMUM POTENTIAL POPULATION

LAND USE CATEGORY	NPA 1	NPA 2	NPA 3	NPA 4	NPA 5	NPA 6	TOTAL
Developed Parks	51	28	58	57	20	70	284
Open Space Preserve	1,860	326	3,302	2,566	395	912	9,361
TOTAL PARKS/OPEN SPACE ACREAGE	1,911	354	3,360	2,623	415	982	9,645
Percent of Total Area	42%	23%	32%	37%	4%	7%	19%
Ratio of Parks/Open Space per 1,000 persons at maximum population level	99 ac per 1,000	24 ac per 1,000	65 ac per 1,000	78 ac per 1,000	7 ac per 1,000	9 ac per 1,000	33 ac per 1,000

The projected parks/open space areas represent **9,645 acres** or **19-percent** of the land area within the Kingman General Plan Study Area. As a percentage of all land uses within the study area, the parks/open space category is within the 10-30-percent recommendation of the *Small Town Planning Handbook*. At full build-out at the maximum potential population level, there will be **33 acres of parks/open space for every 1,000 persons**. As a percentage of land area, NPAs 1, 3 and 4 have the largest amount of land projected for parks/open space, due mainly to topographic limitations to development and the presence of public lands that have been or may be preserved in these areas.

CONCLUSION

The **Kingman General Plan Projected Land Use Map** attempts to provide a reasonable overall balance of land uses to meet the projected future needs of area residents as the population continues to grow. Once again, the land use map is not static in that it may be amended by the City Council when it determines that conditions warrant. However, the land use map should not be viewed as a super-layer of zoning subject to monthly revisions and changes. The land use map should only be amended when there is clear evidence of changes in assumptions, conditions or dynamics exist. The *Code of Ordinances of the City of Kingman, Arizona*, Section 2-133 through 2-137 provides further details for amending and implementing the land use plan to help guide short-term and long-term growth and development within each NPA and within the study area as a whole.

The first part of the paper discusses the importance of the first two years of life for the development of the brain and the role of the environment in this process. It is argued that the first two years of life are a critical period for the development of the brain and the role of the environment in this process. The second part of the paper discusses the importance of the first two years of life for the development of the brain and the role of the environment in this process. It is argued that the first two years of life are a critical period for the development of the brain and the role of the environment in this process.

CONCLUSION

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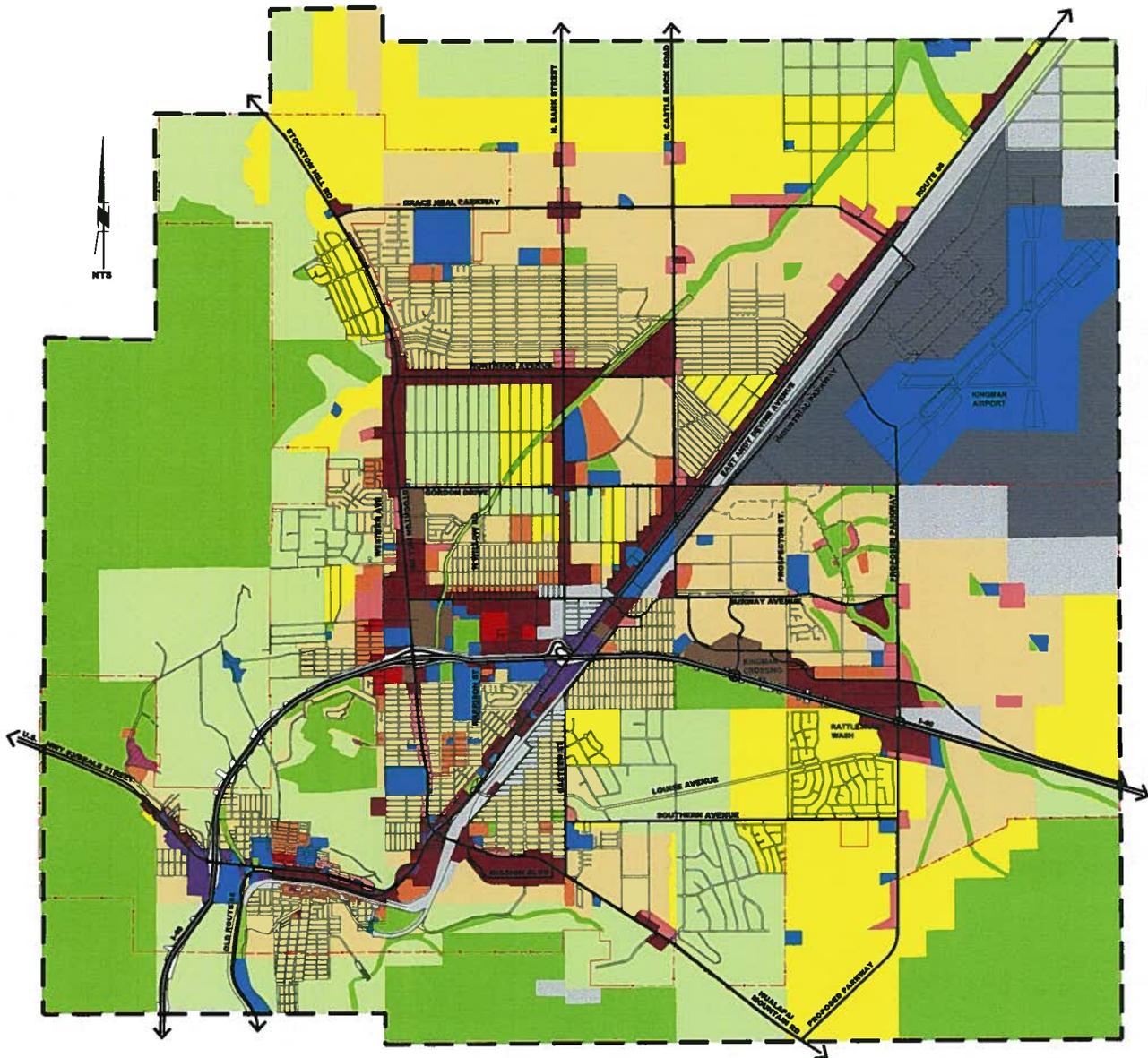
KINGMAN GENERAL PLAN 2030 PROJECTED LAND USE MAP

LAND USE DESIGNATION

- RURAL DENSITY RESIDENTIAL
(1 DU OR LESS / AC)**
- LOW DENSITY RESIDENTIAL
(1-2 DU/AC)**
- MEDIUM DENSITY RESIDENTIAL
(3-8 DU/AC)**
- INTERMEDIATE DENSITY RESIDENTIAL
(9-16 DU/AC)**
- HIGH DENSITY RESIDENTIAL
(17-28 DU/AC)**
- NEIGHBORHOOD COMMERCIAL**
- COMMUNITY COMMERCIAL**
- REGIONAL COMMERCIAL**
- HIGHWAY SERVICE COMMERCIAL**
- LIGHT INDUSTRIAL**
- MANUFACTURING INDUSTRIAL**
- PUBLIC / QUASI-PUBLIC**
- PARKS / OPEN SPACE**

LEGEND

- PROPOSED INTERCHANGE**
- GENERAL PLAN BOUNDARY**
- MUNICIPAL CITY LIMITS**
- MAJOR STREETS**



MAY 2004 Prepared
 APRIL 2005 Revised
 APRIL 2006 Revised
 JUNE 2007 Revised
 MAY 2008 Revised
 JAN. 2009 Revised
 JULY 2009 Revised Boundary
 FEB. 2010 Revised
 AUG. 2012 Revised
 NOV. 2012 Revised Date
 Refer to Resolution Nos. 4206 for Golden Valley Ranch
 & 4207 for Peacock Highlands Land Use Plans

ENGINEERING SERVICES
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 Roger Corvath

CHAPTER 5

GROWTH AREA ELEMENT

INTRODUCTION

The *Growth Area Element* is one of the elements required by the Arizona Revised Statutes (ARS§9-461.05.D.2.), The purpose of the *Growth Area Element* is to identify areas that are particularly suitable for planned multi-modal transportation and infrastructure expansion, and improvements designed to support a planned concentration of a variety of uses, such as residential, office, commercial, tourism and industrial uses. This element is required to include policies and implementation strategies that are designed to:

- A.) Make automobile, transit, and other multi-modal circulation more efficient, make infrastructure expansion more economical and provide for a rational pattern of land development.
- B.) Conserve significant natural resources and open space areas in the growth area and coordinate their location to similar areas outside the growth area's boundaries.
- C.) Promote the public and private construction of timely and financially sound infrastructure expansion through the use of infrastructure funding and financing planning that is coordinated with development activity.

MAJOR ISSUES

POPULATION GROWTH

The City of Kingman and the surrounding areas within the Kingman General Plan Study Area experienced steady, sustained growth from the time the Kingman General Plan was adopted in 1992 through 2008. In 1990 the population within the City of Kingman was 13,769, and by the year 2000 the population had risen to 20,069; an average annual increase of 5.2%. The 2010 U.S. Census stated that Kingman had a population of 28,068 and a July 1, 2012 population estimate of 28,335. Over the previous 40 year period the average growth rate was 2.7-percent.

The New Kingman/Butler CDP, which includes much of the area north of Kingman that lies within the General Plan Study area, had a population of 11,627 in 1990. This population rose to 29,089 in 2010; an average annual increase of 4.7-percent since 1990. The 20-mile labor market area population was estimated to be 56,000 in 2012 and is projected to be 61,521 in 2016. The Kingman area grew 24-percent from 2000 to 2012 and 52.45-percent from 1990 to 2000.

RECENT RESIDENTIAL DEVELOPMENT

Substantial new residential development has occurred in the Kingman area from 1990 to 2008. Most of this residential development in the City has been in the form of single family homes. Between January,

1990 and December, 2008, 5805 new single family housing units were permitted. The peak year of single-family residential development occurred in 2005 with 910 new housing starts. Since 2008, new housing starts slowed with the City issuing only 56 in 2009, 35 in 2010, and 36 in 2011. However, in 2012, new housing starts have climbed to 78 new housing starts. Foreclosures and the lack of mortgage money are attributed to the slow down in the area economy. Much of the growth was a result of people being able to sell their houses in Southern California for a substantial profit and then relocating in Kingman where housing was less expensive. The result of buyers in Southern California not being able to secure mortgage money ended the retiree migration to Kingman and thereby eliminated the demand for homes for these types of buyers and the demand for housing for construction workers and related industry workers.

Much of the new single family development in the City is occurring in the eastern portion of the City. The completion of the Airway Underpass provided much easier access to the northeastern portion of the City. The areas southeast portion of the City also has been a significant growth area. Walleck Ranch in the Gordon Drive/Stockton Hill Road area is another new housing development area. Additional residential infill has occurred throughout the City especially within several improvement districts. These areas include the Kingman Airport Tract, Kingman Air-Rail Manor, and Gates Avenue improvement districts. Within the Mohave County portion of the General Plan Study Area, residential development has been in the form of infill within the existing New Kingman Addition, and within new subdivisions including Cerbat Ridge, Chaparral Mesa, and Fountain Hills.

In addition to single-family development, several multiple family developments have occurred in the City within the last ten years. Tivoli Heights (78-units), Harrison Haven (57-units), Copper Ridge Apartments with 156 units, Parkcrest Village Apartments with 80 units, and Rutherford Village with 45 lots for duplexes, triplexes and four-plexes, have all been developed since 1992.

RECENT COMMERCIAL DEVELOPMENT

Commercial development with the City of Kingman has continued to increase in the past 20 years to keep pace with the population growth. The single largest commercial development that has occurred in Kingman since 1992 is the Super Wal-Mart store east of Stockton Hill Road and south of Airway Avenue.

New retail development along the Stockton Hill Road corridor has been added since 2006. CVS Pharmacy, McDonalds, In-N-Out Burger, Carl's Jr. Discount Tire, and Wash Me Car Wash have developed north of I-40 on Stockton Hill Road since 2008. Walgreens has a new store at Stockton Hill Road and Andy Devine Avenue. Though there still is a high vacancy rate in commercial buildings, retail establishments locating in vacant commercial buildings. The commercial spaced that was occupied by Walmart and Albertson's located on Stockton Hill Road and Beverly with about 230,000 square feet of retail space is now fully occupied. A new owner of the "Frontier Center", an 82,055 square foot abandoned shopping center, located east of Stockton Hill Road and north of Detroit Street has been purchased by a developer and is under consideration for revitalization. New relatively small retail development is taking place along Route 66 north of I-40.

Finally, Hualapai Mountain Road has begun to experience commercial growth including a convenience store and gas station, business office, doctor's office, bank, and a small retail center. The Hualapai Mountain Road Corridor was established to limit the range of commercial uses and to have a higher level of development. However, as a result of a slow economy, the City is allowing a greater range of uses in this corridor.

INFILL DEVELOPMENT VS. EDGE DEVELOPMENT

Residential and commercial development that has occurred in the Kingman area in the last several years can generally be characterized by distances from existing development, infrastructure and services. Infill Development is defined as that which occurs in areas largely surrounded by existing development. Edge development is the opposite and is defined as development that occurs in areas where there is little or no existing development or infrastructure, and few, if any, services, schools or parks. There are a number of advantages to development that occurs within infill areas within the Kingman General Plan Area. Infill helps to expand and connect public infrastructure including roads, water and sewer into areas mostly surrounded by existing development. Infill also enables the more efficient provision of services such as sanitation, fire and police protection.

Examples of recent infill development include the Walleck Ranch development and Kingman Airport Tract improvement district both located between Gordon Drive and Airway Avenue, east of Stockton Hill Road. Infrastructure including water and sewer lines, and paved streets with curb, gutter, sidewalk, were extended throughout these developments. Residents who move into these developments also have the advantage of being less than one mile from Centennial Park, the County Library, Kingman Academy of Learning, and major shopping areas along Stockton Hill Road. These areas also abut the Mohave Wash which is to be developed with non-motorized hiking and biking trails that may eventually link the Kingman High School North Campus with Centennial Park.

There are also examples of successful commercial infill, redevelopment and reuse of existing commercial buildings particularly in the Hilltop/Country Club Neighborhood Planning Area #2. This includes areas of new commercial development along Stockton Hill Road south of I-40 and the redevelopment of commercial buildings including two hotels and an office building on E. Andy Devine south of I-40. Downtown redevelopment projects include the Powerhouse Visitor's Center which has become a primary tourist stop.

An example of edge development is the Rancho Santa Fe subdivision on the east side of Kingman. Rancho Santa Fe has actually been quite successful since its development in 1992. It has provided perhaps the single largest area of single family homes in a low density environment in Kingman. However, Rancho Santa Fe has a number of disadvantages such as a lack of a significant portion not be connected to the City's sewerage system and is more than a mile from any commercial development, schools, parks, or any other existing services. Rancho Santa Fe is currently connected by two nearly parallel roads Southern Avenue and Louise Avenue with no other transportation linkage to the rest of Kingman. Development of the Rancho Santa Fe Parkway interchange with I-40 will increase accessibility to the area and spur new development. Infrastructure costs in addition to securing the monies to fund the interchange have stalled this project.

An example of edge development in the commercial sector is the Hualapai Mountain Medical Center (HMMC) on Santa Rosa Boulevard. The Hualapai Medical Center, which was completed in 2009 is a 70-bed acute care hospital and featured comprehensive hospital services. This four-story hospital was constructed in the Kingman Crossing area in anticipation of the Kingman Crossing interchange with I-40 and the new Kingman Crossing Boulevard. New infrastructure extended in to serve this site. A controlled arterial traffic control system, the site's portion of a major drainage infrastructure has all been developed. The economic downturn caused the retail developers to withdraw from the project area and the HMMC apparently was depending on the

anticipated growth experienced in the 2003-2008 period to continue. The hospital soon closed and has since been purchased by the Kingman Regional Medical Center. Reopening of portions of the facility is anticipated in 2013.

SOME FACTORS THAT DETERMINE WHERE GROWTH OCCURS

In determining where growth is expected to occur in Kingman, it is important to know not only where growth has occurred in the past, but how and why this growth has happened. Geography, ownership patterns, accessibility, and distance from existing infrastructure such as developed roads and utilities have been the primary determiners of whether and when a particular property is likely to be developed.

For example, the Cerbat Mountains and foothills on the west side of Kingman, the hills south of downtown Kingman and the Hualapai Mountains on the southeast side of Kingman have served to direct most growth into the generally flatter areas in the Hualapai Valley. Growth has been generally progressing north and east throughout the area. U.S. Bureau of Land Management (BLM) Lands in the southern and western and southeast portions of the General Plan Study Area also limit growth. Although, BLM land can be traded in order to consolidate land holdings. The Vista Bella/Kingman Airport NPA #5, located north of I-40 and East of the railroad tracks has experienced slow growth, due in part to geographic isolation from the rest of the Kingman area created by the I-40 and railroad track barriers as well as the proximity of the Kingman Airport. The Airway Underpass, opened in 2007, has significantly increased the access to this area. Residential development in this area has had access to sewer only recently. The East Kingman/Hualapai Mountain Road NPA #3, located south of I-40, on the other hand has seen rapid growth due in part to accessibility and the availability of water and sewer extensions.

Additional factors affecting growth include the condition and availability of land. During the late 1920's and early 1930's in anticipation of the impact of Hoover Dam, several areas were platted into subdivisions that have 25-foot and 30-foot wide lots that are 100-feet deep. These subdivisions were developed in a grid pattern. Many of these subdivisions were not developed, but sold to different individuals. A number of these tracts of land have been assembled and construction took place on them during the "boom" period. However, the lot configuration and platted streets are not conducive to present day development. Developers have sought unplatted land for development, which is often not adjacent to the currently developed areas. Although development of these areas may be less expensive on a per unit cost, the work to assemble the property and replat the land makes the land less desirable in terms of time and the ability to develop a desirable product.

Given these facts, it is possible to make some general predictions of where growth is likely to occur in the next five, 10 and 20 years. It is also possible to create goals, objectives and policies that will serve to develop a rational pattern of land development and to make the infrastructure expansion more efficient and economical. This is a strategy of the *Growth Area Element* as put forth in the Growing Smarter legislation.

IDENTIFIED GROWTH AREAS

Based upon recent growth patterns and the factors that influence where growth occurs, this element has identified and categorized likely growth areas within the Kingman General Plan Study Area that may see development occur within the next 20 years.

FIRST TIER GROWTH AREAS

First Tier growth areas are regions within the General Plan Study Area in which development has already occurred or is underway due to the proximity and availability of existing infrastructure, and favorable geography, ownership patterns, and accessibility. It should be the City's goal to encourage new development to occur within these first tier growth areas. This goal will serve to create opportunities for residential and commercial infill development that will provide for needs of the expanding population and the local tax base. Within the First Tier Growth areas staff has identified several specific growth regions; they are as follows:

Downtown Kingman/NPA #1: The downtown area is identified in this case as the region between I-40 and El Trovatore Hill approximately one-half mile either side of Beale Street. This is the original townsite of Kingman that has seen little growth in the last several years. However, there are opportunities for infill development including residential, commercial and public uses. The infrastructure is largely in place in the downtown area, although upgrading will be needed in certain areas. The *Redevelopment and Public Facilities and Buildings Element* of the Kingman General Plan addresses redevelopment and infill issues in the downtown area in more detail. Infill providing a mixture of uses should be encouraged in downtown Kingman to provide housing and employment opportunities as well as needed densities to support public transit opportunities. Quiet zone development to reduce train noise is an important step toward making this area more attractive to residential and commercial development. Improved property maintenance standards will make new investment more likely in this area.

North Stockton Hill Road Corridor/NPA #4: This area extends approximately one-half mile on either side of Stockton Hill Road between Northern Avenue and I-40. This corridor is becoming the primary commercial center of Kingman. Opportunities for residential development are also there within this corridor as well. A mixture of regional and community commercial type development and medium to high density residential development should be encouraged within this area. The portion of this corridor that lies south of Airway Avenue and east of Stockton Hill Road extending to the Centennial Park area is particularly suited for a variety of residential and commercial development that could reduce automobile dependency and encourage multi-modal transportation such as bicycling and public transit. The use of Planned Development Districts within these areas should be encouraged. Development of curb, gutter, sidewalks, and the improvement of property maintenance standards are needed to attract new investment and encourage development.

Hualapai Mountain Road Corridor/NPA #3: This area extends up to one-quarter mile on each side of Hualapai Mountain Road from E. Andy Devine Avenue to Eastern Avenue. This corridor is just becoming ripe for a variety of commercial and residential development. This corridor is also subject to the provisions of the Hualapai Mountain Road Overlay District which sets certain design standards for development along this street. The area is considered sensitive to development which could disrupt view corridors, existing residential areas and/or traffic patterns. Development in this corridor would be expected to be of a lower intensity than the North Stockton Hill Corridor. A mixture of neighborhood and community commercial, and medium and intermediate density residential development should be encouraged within this area.

SECOND TIER GROWTH AREAS

Second Tier growth areas are regions within the General Plan Study Area in which some development has taken place or is adjacent to areas of major development. However, due to a variety of factors such as some accessibility problems, lack of infrastructure, steep geography in places, or distance from public services, etc., major development will be seeking public funding assistance to develop. It should be the City's goal to encourage new development to occur within these second tier growth areas before third-tier areas are developed. Second tier development should occur after much of the first tier areas are developed. Second tier development should take place to accommodate new population growth that requires the expansion of residential and commercial development. Second Tier growth areas are beyond the area of the First Tier areas and include the following specific growth regions:

Vista Bella, Rancho Santa Fe, I-40 Corridor/NPAs 3 & 5: The Rancho Santa Fe subdivision south of I-40 at the east end of Louise Avenue has become one of the main residential growth areas in the City of Kingman with the permitting of over 400 single family home since its inception in 1992. The Vista Bella development north of I-40 currently consists of The Villas and Valle del Sole subdivisions. Development in this area has been slower since the first dwelling was built in the mid 1980s. Even though there was a master plan developed of the area and "hard" zoning was approved by the City for Vista Bella in 2002, the developer has sold land to the Kingman Unified School District, the master plan was amended and two schools have been developed that are not consistent with the original master plan. Between these two developments lies undeveloped land on either side of I-40.

Both developments have some things in common in that they are both served by City water, but largely not served by sewer. The Villas portion of Vista Bella does have sewer service and City sewer has been extended to the northern portion of the Rancho Santa Fe development. Both developments are accessible by only one or two major roads and do not yet have freeway access. Future development in the Vista Bella area is limited also by the proximity of the Kingman Airport to the north. Finally, both developments are not presently served by any commercial development, parks, or any other existing public services. Additional residential and future commercial development will become more possible once accessibility is improved with the development of the Rancho Santa Fe and Kingman Crossing interchanges and connecting

roadways. Infrastructure needs to be extended. The Airway Avenue underpass at the railroad tracks has improved access to the Vista Bella area. .

State Trust Sections 16, 32 in T.21N., R.16W. and Section 36, T.21N., R.16W.: These three state trust sections are surrounded by or adjacent to existing development, and, therefore, may be ripe for development in the not too distant future. Section 16 is located along Louise Avenue between Rancho Santa Fe and Kingman Park Estates and is undeveloped at this time. Section 32 is located adjacent to La Senita School and Kingman High North Campus has an approved development plan from the State. Section 36 lies west of Stockton Hill Road north of the Canyon Shadows area and south of the Camelback area. All three trust sections are immediately adjacent to City water and are adjacent to or within less than one-half mile from the City sewerage system. Sections 16 and 32 have direct access to developed roadways while Section 36 has access to a developed roadway, Sierra Vista Avenue. Section 36, while mountainous in the western region, is flatter on the east side which is immediately adjacent to a major commercial corridor, Stockton Hill Road. The western portion of Section 36 should be considered for open space preservation due to the steepness of the slopes in that area and the fact that much of the area is above the City's water pressure zones and also includes several ancient petroglyphs. Based upon these facts, the City and State Land Department have begun consulting with each other regarding the development of plans for these State Trust lands which support the Kingman General Plan 2020. The State Land Department held an auction of Section 16 in 2006, but there were no bidders at the auction.

THIRD TIER GROWTH AREAS

Third Tier growth areas are regions within the General Plan Study Area in which development has largely not yet taken place. Development in these areas is not likely for more than 10 years due to one or more of the following: The lack of nearby infrastructure such as water and sewer, unfavorable geography, public land ownership, and limited access. The City should not encourage new development to occur within these third tier growth areas for at least 10-years or until the first and second tier areas are mostly built out and new population growth requires the expansion of residential and commercial development. Much of the third tier development is outside of the City and the City does not have land use jurisdiction of these areas. The Third Tier growth areas lie beyond the First and Second tier areas and include the following regions:

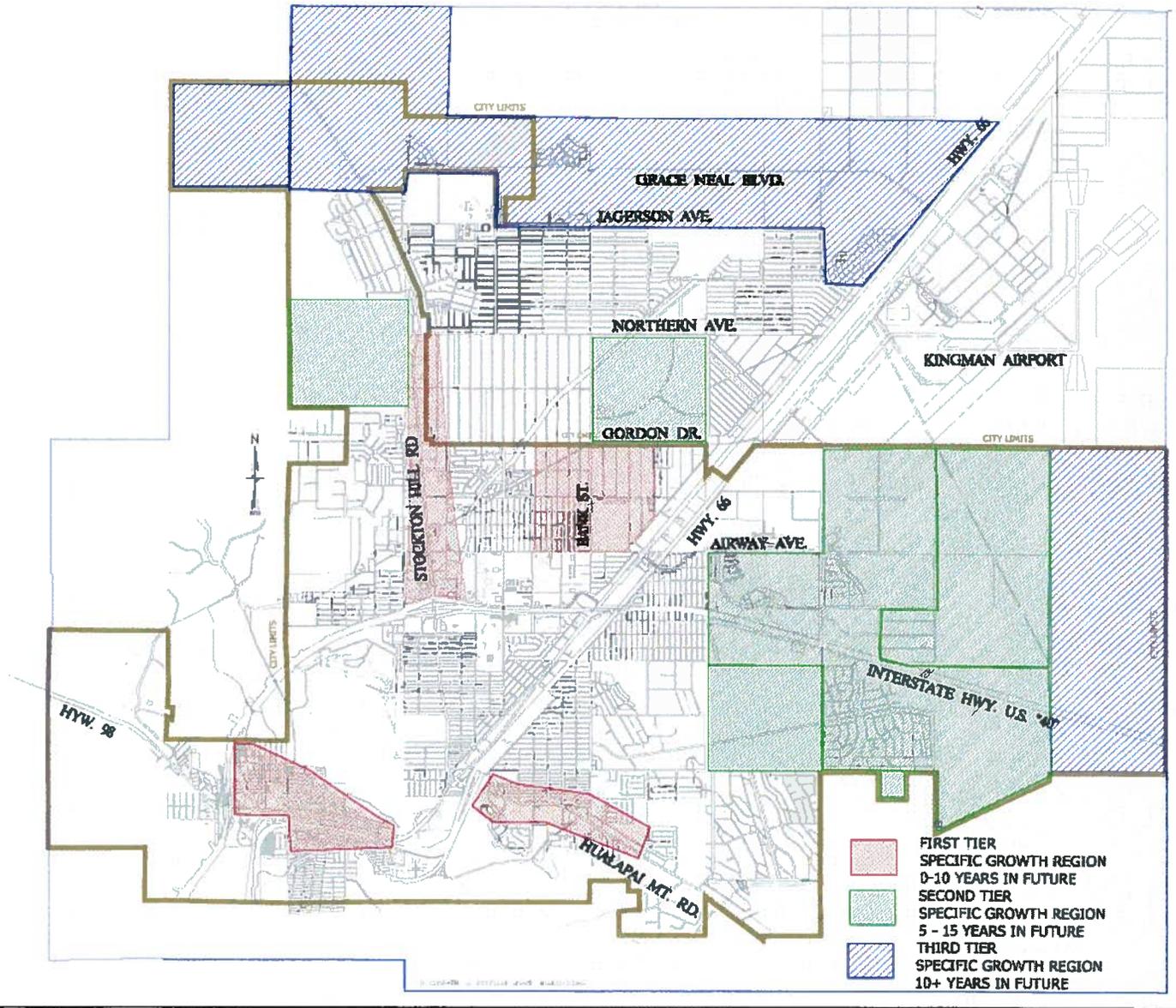
North of Jagerson Avenue/NPA 6: This region lies mostly outside the city limits and includes State Trust Sections 16, 18, 20, 24 in T.22N. R.16W. as well as State Trust Section 24 in T.22N. R.17W which is in the City. It also includes private lands adjacent to these areas. With few exceptions, land north of the Jagerson Avenue alignment is largely undeveloped at this juncture. City water and sewer is accessible to properties immediately along Jagerson, however, there is very little other infrastructure, including developed roads. At present there is no commercial development to support residential growth in this area. What residential development that has occurred is limited to either unsubdivided parcels, or one subdivision, Fountain Hills, which is not tied into the City water system. Although this area is mostly outside the City limits, it lies within the City Water Service Boundary. The City can exert some control over the timing and

location of growth by requiring new development in the County to adhere to City development standards at the time of water service requests.

East of Vista Bella and North of Rancho Santa Fe/NPA 5: In 2010 and 2011, the City annexed this area in anticipation of the Rancho Santa Fe Parkway traffic interchange and subsequent commercial development. Currently much this area is inaccessible by developed roads and has no nearby services. Funding for the traffic interchange has not been secured and until the traffic interchanged is constructed, development seems unlikely in the near term. When development does take place, this area will be very attractive to a mix uses including industrial, commercial and residential development.

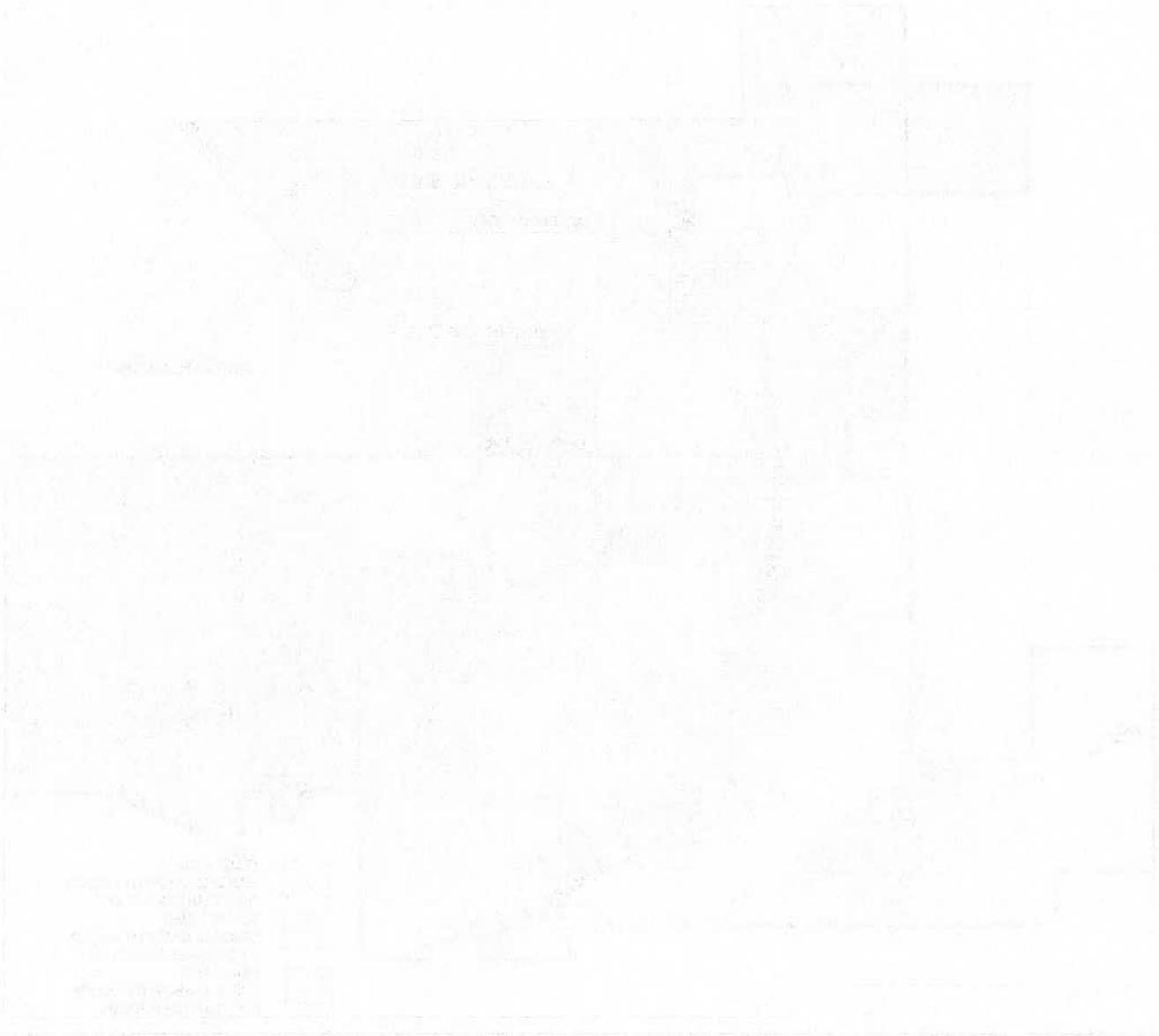
CITY OF KINGMAN

FIGURE 3-1. GROWTH AREA MAP



PROPOSED DEVELOPMENT

FOR THE PROPOSED DEVELOPMENT OF THE PROJECT



CHAPTER 6

PUBLIC FACILITIES AND SERVICES

ELEMENT

INTRODUCTION

Essential in all community planning is an evaluation of the public services and facilities, which include plans for police, fire, emergency services, sewage, refuse disposal, drainage, local utilities, rights-of-way, easements and facilities for them.

MAJOR ISSUES

Major issues to be addressed by this element include:

- 1) Adequate emergency services delivery services to all areas of the City;
- 2) Adequacy of public water and sewerage systems to service the City in the next 20-years.
- 3) Storm drainage system in the City that will protect all structures up to a 100-year storm event.
- 4) A refuse disposal system to assure proper sanitation from solid waste hazards.
- 5) Adequate rights-of-way and easements to accommodate public utilities, storm drainage, and emergency services access.

CURRENT CONDITIONS

FIRE SERVICE

The Kingman Fire Department has four fire stations located in various strategic areas of the City. Each station is staffed with three to four firefighter/emergency medical personnel 24-hours a day, seven days a week. The fire department is adequately equipped and the equipment is upgraded on a scheduled basis. Consolidated dispatch services with surrounding fire districts and the Kingman Police Department was developed in 2012 and is under the direction of the Kingman Fire Department.

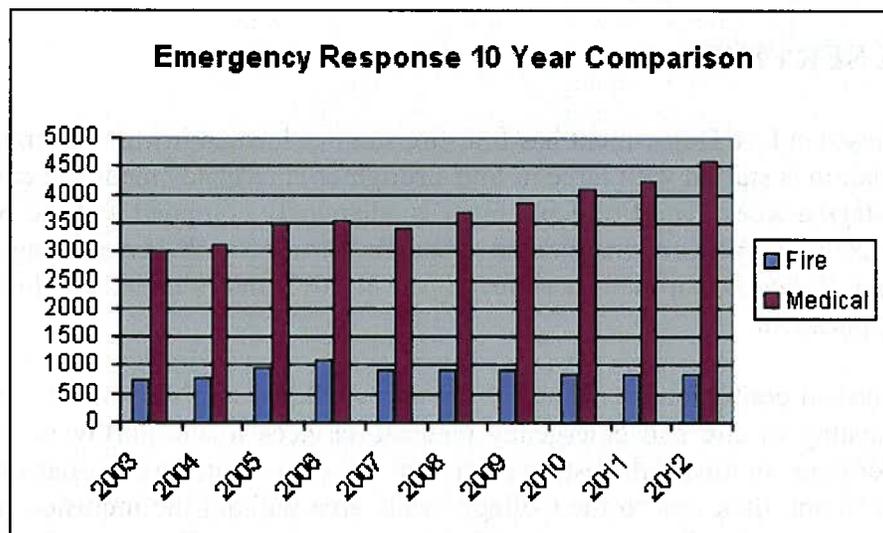
The physical configuration of the City places challenges on the ability to efficiently provide the same quality of fire and emergency medical services to the northwest area of the City. The incorporations in the northwestern portion of the City created a long-narrow strip along Stockton Hill Road and then east to the College Trails area without the inclusion of the more developed areas between Gordon Avenue and Jagerson Avenue. This annexation pattern makes the

justification of placing City fire service facilities and personnel close enough to respond to this area in the same quick manner as the remainder of the City very costly. As a result, a mutual aid agreement with the Northern Arizona Consolidated Fire District, which serves the unincorporated area north of Gordon Avenue, to provide first response services to this area. This mutual aid agreement provides the same first response services to the northwest portion of the City as it does in the remainder of the City.

As development in the northeast section takes place, a fire station is needed. Such a facility is estimated to be \$2.8 millions (2012 dollars) for building, equipment and personnel. Subsequent operations are estimated to be \$800,000 annually to operate the station. Although various sites have been considered, the location of the station is largely dependent on what the eastern boundary of the City will be in the next 10-years.

**Kingman Fire Department
Total Responses
10-Year Comparison**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% of Increase from 2003
Fire	751	775	947	1068	901	921	916	822	845	838	11.58%
Medical	3024	3128	3475	3515	3375	3673	3831	4074	4229	4589	51.75%
Non-Emergency	3134	3437	5,000	4,225	3944	3984	3788	3529	3828	3532	12.70%
Total	6909	7340	9422	8808	8220	8578	8535	8425	8902	8959	29.67%
Total Emergency	3775	3903	4422	4583	4276	4594	4747	4896	5074	5427	43.76%



POLICE SERVICES

The Kingman Police Department continues to provide outstanding law enforcement services despite budget cuts since 2008. Staffing and equipment are as follows:

Police Department Staff	
Sworn Officers	53
Cadets	2
Communication Specialists	12
Animal Control/Code Enforcement Officers	4
Reserve Officers	1
Records and Support Staff	6
Evidence Technician	1

Average City Police Responses per Month: 2,436

Support Vehicles and Equipment	
Total Police Vehicles	64
Marked Patrol Cars	32
Motorcycles	3
4WD Pickups	3
Animal Control Vans	2
Detective Vehicles	18
Tactical Support Van	1
Mobile Command Post	1
Armored Vehicle	1
“Jingles”(vintage patrol car)	1
Radar Trailer	1
Support Trailer	1

In 2012, the City experienced 2240 adult arrests and 555 juvenile arrests. The City responded to 25,063 “911” calls and responded to 39,690 incidents.

Water

Water is provided to all areas within Kingman and the surrounding areas by the municipal water system. The service area is 70.6 square miles. All of the water in our system is pumped from deep groundwater wells. The Hualapai Basin Aquifer is to the north of Kingman and provides the majority of our water. The downtown area wells pump from the Sacramento Basin Aquifer which extends south of Kingman.

Hualapai Basin Aquifer: Eleven active wells. The wells average 962 feet in depth, with the average depth to water being 640 feet.

Downtown Area: Four active wells. These wells average 251 feet in depth, with the average depth to water being 130 feet.

Present pumping capacity: 12,081 GPM/16.128 MGD

Total Well Production: 2.9 Billion gallons per year (2009)

Storage: 13.15 Million Gallons

Treatment: Chlorination

Temperature: Average delivered temperature: 88F

Current Usage: Average Daily Per Capita Use: 162 GPD

Total Water Accounts in January 2013: 18,481

The water system infrastructure is not extended to the newly incorporated areas of the City. The area known as Rattlesnake Wash does not have water service. A new water pressure zone and distribution lines need to be developed to this area. The northwestern portion of the City also needs the creation of the water pressure zone and line extension to serve any development beyond the current development in the northwestern portion of the City. There is a private water company, Cerbat Water Company that is serving portions of the unincorporated area north of the City.

Sewer

Sewage treatment and disposal is provided by the City and serves much of the incorporated areas of Kingman and in some surrounding areas. The City completed a new wastewater treatment plant at the Hilltop facility north of the City in 2010. This plant has a treatment capacity of up to 5.1-millions gallons a day and in 2013 was receiving half of its treatment capacity. The Downtown Treatment Plant was rebuilt and completed at the end of 2012. This plant has a treatment capacity of 0.62 million gallons a day and in 2013 was receiving approximately 0.31 millions gallons a day. Both plants were in compliance with the environmental standards established by the Arizona Department of Environment Quality. The total number of sewer accounts in January 2013 was 9,111 connections. The number of sewer connections is less than half of the water connections. In 2012, the City Council adopted an Ordinance that mandated that all new subdivisions must connect to the City's sewerage system.

The cost of upgrading the wastewater treatment plants to meet environmental quality standards and long-term treatment needs has placed a tremendous burden on the users because the plants were designed to treat greater capacities than the initial flows. The burden of paying for these capital improvements is falling on the current users, which is about 50-percent of total number of users that these plants can serve. Therefore, the current users are paying about double of the capital cost to meet current debt service. The long-term benefits will be realized, but the short-term impact is burdensome.

Type of Treatment

The plant is designed to accept an annual average of 2 million gallons a day with a discharge limit of 3 million gallons a day. The new oxidation ditch will have the capacity to treat 5.1 million gallons a day with a permitted discharge of 4.8 MGD.

The Downtown Wastewater Plant currently has a discharge limit of 500,000 gallons per day. These aerated lagoons are being replaced with a Kubota Membrane Filtration system. The treatment capacity will increase to 650,000 gallons per day and produce reuse quality effluent. The discharge limit will be 600,000 gallons per day.

Solid Waste

Garbage collection and disposal is provided by the City of Kingman for all areas within the Kingman City limits. Waste Management, Bulldog Disposal & Recycling and Westside Disposal Services provide service for Commercial garbage collection and for areas outside the City.

Landfill Operation

The sanitary landfill is operated by Gambi Disposal of Arizona,

The first of the proposed... (text is mirrored and illegible)

Proposed Treatment

The plant is designed to... (text is mirrored and illegible)

The proposed... (text is mirrored and illegible)

Solid Waste

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Effluent Disposition

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CHAPTER 7

PARKS, RECREATION, TRAILS AND OPEN SPACE ELEMENT

INTRODUCTION

The *Open Space Element* is one the elements required under by the Arizona Revised Statutes. The following items are required to be addressed:

- A. A comprehensive inventory of open space areas, recreational resources and designations of access points to open space areas and resources.
- B. An analysis of forecasted needs, policies for managing and protecting open space areas and resources and implementation strategies to acquire additional open space areas and further establish recreational resources.
- C. Policies and implementation strategies designed to promote a regional system of integrated open space and recreational resources and a consideration of any existing regional open space plans.

For cities fewer than 50,000 in population, a *Recreation Element* showing a comprehensive system of areas and public sites for recreation may be included which deals with the location and proposed development of any part or phase of natural reservations, parks, parkways and scenic drives, beaches, playgrounds and playfields, open space, bicycle routes, and other recreation areas.

PARKS, RECREATION, OPEN SPACE AND TRAILS (PROST) PLAN

In October, 2000 the Parks, Recreation, Open Space and Trails Plan or PROST Plan was developed to serve as a guideline for the Kingman Common Council and City staff to use in the decision making process regarding park site acquisition, development and maintenance, recreational programs, open space acquisition and trail development. This plan included new standards for all of these facilities and programs that will better meet the needs of all citizens of Kingman. As with all our planning programs, this document addressed all land within the City of Kingman General Plan Study Area. The PROST plan addresses the required features of the *Open Space Element* as well as some of the optional features of the *Recreation Element* as outlined by the Growing Smarter legislation. The PROST plan was updated for inclusion in the Kingman General Plan 2020 and is included here as well.

MAJOR ISSUES

PARK STANDARDS

The following standards indicated in **Table 1**, will be the guide for the acquisition and development of new park sites. However, some current developed parks and currently city-owned future park sites may not meet the area requirements called out in these standards.

TABLE 1: KINGMAN PARK SITE STANDARDS

	Play Lot	Neighborhood Park	Community Park
Minimum Area	less than 1 acre	5-10 acres	40-50 acres
Service Radius	1/4 mile	1/2 mile	2 miles
Typical Facilities	safe-play apparatus, turf trees seating areas shade	safe-play apparatus picnic areas green sports areas un-lighted fields seating areas multi-use court restrooms security lighting	lighted baseball, softball, football, soccer fields tennis, volleyball, racquetball, basketball courts, playground, picnic areas, recreation bldgs., pools, restroom, concession bldgs., security lighting

There are and will continue to be a need for specialized parks that may be incorporated into existing or planned parks, or serve as stand alone facilities. Some of these types of facilities include skateboard parks, BMX bicycle tracks, indoor swimming pool, outdoor amphitheater, indoor ice rink, indoor running track, indoor basketball courts, water park, and a soccer complex. Standards for these specialized parks are outlined in **Table 2**.

TABLE 2: COMMON PARK FACILITIES STANDARDS

Facility	Dimensions	Area	Orientation
Basketball youth high school collegiate	46' X 84' 50' X 84' 50' X 94' 5' buffer	2400-3036 sf 5040-7280 sf 5600-7980 sf	Long axis north/south
Baseball official little league	90' baselines 60.5' pitching distance 320' min foul lines 400'+ center field 60' baselines 46' pitching distance 200' foul lines 200'-250' center field	3.0-3.85 acres 1.2 acres	Line from home plate through pitchers mound to run east/west

Facility	Dimensions	Area	Orientation
Soccer	195'-225' X 330''-360' 10' buffer	1.7-2.1 acres	Fall season-long axis northwest or southeast. For longer periods, north/south
Football	160' X 360' 6' buffer	1.5 acres	Fall season-long axis northwest or southeast. For longer periods, north/south
Tennis	36' X 78' 12' buffer	800-1,000 sf	Long axis north/south
Volleyball	30' X 60' 6' buffer	4,000 sf	Long axis north/south
Handball	20' X 40' 10' buffer 20' overhead clearance	800-1,000 sf	Long axis north/south, front wall north end
Swimming Pool teaching competitive	25 yds X 45' even depth of 3'-4' 25 m X 16 m 2:1 deck to water ratio	1-2 acres	N/A
Ice hockey	85' X 200' rink	22,000 sf	N/A
Field Hockey	180' X 300' 10' buffer	1.5 acres	Fall season-long axis northwest or southeast. For longer periods, north/south
Golf driving range par 3 (18 hole) 9 hole standard 18 hole standard	900''' X 690''' wide 12''' per additional tee 600-2,700 average length 2,250 average length 6,500 average length	13.5 acres for 25 tees 50-60 acres 50 acre min 180 acre min	Long axis southwest to northeast with golfer driving northeast north/south axis most holes

RECREATIONAL PROGRAMS

A broad variety of recreational programs are offered by the City of Kingman. These programs, like our parks, are intended to serve all people within the greater Kingman area, regardless of whether they live within the city limits. User fees for recreational programs are set to cover the direct costs of the program such as instructors and equipment.

Many programs have a long history of support and community involvement, including youth and adult sports leagues. Developing new recreation programs is more complex. Surveys, questionnaires, advertisements in local media, suggestions, brainstorming, and national trends are all used to come up with new ideas for programs. Staff then has to gauge the overall interest in the program, and try to find a qualified person to lead or instruct the activity, along with coordinating the time, place, and equipment necessary for it. At the conclusion of the program schedule, evaluations, interviews, and costs analysis are conducted to determine whether it should be offered again.

OPEN SPACE ACQUISITION

The acquisition of open space by the City is guided by a variety of criteria. The emphasis for acquisition are large parcels, in areas of unique geographical formation, areas with limited development potential due to slope or flooding potential, and areas of archeological significance.

The mountains, hillsides, and buttes that frame the Kingman area should be preserved. The purchase of property for the preservation of open space and providing buffers to development should be prioritized within the designated open space reserves such as the Cerbat Foothills Recreation Area, the White Cliffs Reserve and other areas with significant natural features such as mountain tops, hillsides, and buttes. In addition to providing development buffers, these areas serve as vital watersheds, wildlife habitat, recreational resources, and scenic view.

Another reason for property acquisition is for flood control purposes. In the purchase of these types of sites, consideration should be given to acquiring larger sites that may also accommodate park and recreation uses. Development of flood control parcels into parks and other attractive open space areas will enhance the beauty of the community and remove the unsightliness of the parcels. For example, the landscaping and development of Mohave Wash into fields and passive recreational facilities that will not be damaged by the occasional flooding will aid in relieving the shortage of soccer practice fields and outdoor recreational needs.

TRAIL STANDARDS

Natural surface multiple use trails existing and proposed in the open space reserves are built to Bureau of Land Management and Arizona State Parks standards. The typical cross section is a four-foot wide path with a two-percent cross slope, and a maximum grade of 10-percent. Switchbacks are frequently used in steep areas to minimize grades. Level landing areas are also beneficial at the end of sections with higher grades. Sight distances and erosion control are key elements in trail design. A well designed trail greatly minimizes the amount of trail maintenance and reconstruction required through normal use and/or heavy rains.

Urban multiple use paths of either concrete or asphalt are designed wider, 8-12 feet, with two feet wide graded shoulders on each side. They generally have a two-percent cross slope with a maximum grade of five-percent. These paths must meet ADA requirements. Design speed, sight distance, and roadway intersections are important aspects for the design of these paths. Detailed information on path design can be found in the Guide for the Development of Bicycle Facilities, published by AASHTO.

CURRENT CONDITIONS

EXISTING PARK FACILITIES

Table 3 on the following page is an inventory of existing park facilities by park type, size, location and amenities within the Kingman General Plan Study Area. The park locations are listed by Neighborhood Planning Area (NPA). For reference purposes NPA 1 is the Historic Downtown/West Highway 93 area; NPA 2 is the Hilltop/Country Club area; NPA 3 is the East Kingman/Hualapai Mountain Road area; NPA 4 is the Centennial Park/Canyon Shadows area; NPA 5 is the Vista Bella/Kingman Airport area; and NPA 6 is the Camelback/New Kingman Addition area.

Park Name	Neighborhood Planning Area (NPA)	Park Type	Size (Acres)	Year Established	Key Amenities
Centennial Park	NPA 4	Community	10	1950	Playground, Picnic Area, Open Space
Country Club Park	NPA 2	Country Club	150	1920	Golf Course, Clubhouse, Tennis Courts
East Kingman Park	NPA 3	Community	5	1980	Playground, Picnic Area
Hilltop Park	NPA 2	Community	3	1960	Playground, Picnic Area
Hualapai Mountain Park	NPA 3	Mountain	100	1970	Hiking Trails, Picnic Area, Open Space
New Kingman Addition Park	NPA 6	Community	2	1990	Playground, Picnic Area
Swimming Pool	NPA 4	Recreation	1	1960	Swimming Pool, Restrooms
Tennis Courts	NPA 2	Recreation	0.5	1950	Tennis Courts, Picnic Area
West Highway 93 Park	NPA 1	Community	4	1970	Playground, Picnic Area
Yoga Studio	NPA 5	Recreation	0.2	2000	Yoga Studio, Open Space

TABLE 3: EXISTING PARK FACILITIES AS OF THE YEAR 2013

Park Name	Park Type	Size	NPA	Other Amenities
Centennial Park	Community	40 acres	4	playground, lighted softball fields, soccer fields, tennis courts, racquetball courts, lighted basketball courts, 2 restroom and concession buildings, swimming pool, recreation center, picnic areas
Southside Park	Community	42 acres	1	playground, lighted softball fields, soccer fields, restroom and concession buildings
Lewis Kingman Park	Neighborhood	9.67 acres	2	dog park, restroom building, picnic areas, ball field
Firefighter's Memorial Park	Neighborhood	8.71 acres	2	playground, Frisbee golf course, skate park, restroom, picnic areas
Cecil Davis Park	Neighborhood	4.68 acres	3	playground, restroom building, picnic area
Locomotive Park	Neighborhood	4 acres	1	picnic area, historic locomotive
Walleck Ranch Park	Neighborhood	3 acres	4	playground, basketball court, picnic area, horseshoe pits, restroom
Canyon Shadows Park	Neighborhood	3 acres	4	playground, basketball court, picnic area, horseshoe pits
Metcalfe Park	Neighborhood	2 acres	1	playground, restroom building, stage, picnic area
Hubbs Park	Neighborhood	1.24 acres	1	playground, picnic area, Hubbs House Head Start Center
Mohave Park	Neighborhood	1 acre	1	playground, basketball court, picnic area
Downtown Swimming Pool	N/A	.6 acres	1	swimming pool, restroom building
Neil Butler Park(County)	Community	20 acres	6	picnic area, ball field, restrooms, playground
Pawnee Park	Neighborhood	2.75 acres	3	Playground, turf area, and a picnic table with a canopy.
Monsoon Park	Neighborhood	6.75 acres	3	Turf area only

LEVEL OF SERVICE STANDARDS FOR PARKS

Level of Service (LOS) Standards provides a bench mark for a community to use in determining service demands and needs. LOS standards are given in this plan to show the needs for park space. The LOS number represents the acreage of developed park space per 1,000 residents. In 2013 there were 129.4-acres of developed park space in the City of Kingman, with a population of 28,279-people based upon the July 1, 2011 population estimate. The 2013 City of Kingman LOS was 4.58-acres of developed park space for 1,000 residents. These figures can be further broken down to provide LOS numbers for Neighborhood Planning Areas (NPA), and by park type, i.e., community park, neighborhood park, or pool. The LOS for the entire Kingman General Plan Study Area using the 2011 census figure of 55,913 population and 149.4 acres of park land was 2.67-acres of park space per 1,000 residents.

The benefit of using LOS is that it provides an unbiased number to use in forecasting park needs and locating and developing park space. The drawback is that the goal LOS number is relative. Nationally, community standards vary widely from 6.25 to 10.5, and it really depends on what the community feels is sufficient for their needs. LOS standards would allow us to compare current park facilities over time as population increases with residential growth and annexations. Given the anecdotal evidence of participation in youth and adult sport and recreational programs, it would appear that Kingman's LOS should be at the higher end of this range. The availability of Hualapai Mountain Park (for camping, hiking, and picnicking) and the water sport opportunities at Lake Mead, Bullhead City, and Lake Havasu City also provides recreational amenities that are not quantified in the City parks and recreational system but are outdoor recreational venues for Kingman residents. Recent questionnaires and community surveys have repeatedly shown that the Parks Department, facilities, and programs are the most popular and well rated of all City functions.

Tables 4 and 5 give a breakdown of the LOS for parks in each NPA within the Kingman General Plan Study Area and LOS by park type.

Neighborhood Planning Area	Population	Park Space (Acres)	Level of Service (LOS)
City of Kingman	28,279	129.4	4.58
City of Kingman (Total)	55,913	149.4	2.67
Northwest	10,000	45.0	4.50
Southwest	10,000	45.0	4.50
East	10,000	45.0	4.50
West	10,000	45.0	4.50
Central	10,000	45.0	4.50
South	10,000	45.0	4.50
North	10,000	45.0	4.50
City of Kingman (Total)	55,913	149.4	2.67

TABLE 4: PARK (LOS) BY NEIGHBORHOOD PLANNING AREA (NPA)

	Park Type	#	Acreage	Total Acreage
NPA 1	NEIGHBORHOOD PARK	4	8.84	50.84
	COMMUNITY PARK	1	42	
	POOL	1		
NPA 2	NEIGHBORHOOD PARK	2	18.38	18.38
NPA 3	NEIGHBORHOOD PARK	3	14.18	14.18
NPA 4	NEIGHBORHOOD PARK	2	6.00	46.00
	COMMUNITY PARK	1	40.00	
	POOL	1	1	
NPA 5		0	0	0.00
NPA 6	COMMUNITY PARK	1	20	20.00
STUDY AREA				149.4
CITY				129.4

2011 GPA LOS of 149.4 acres of park space per 55,913 residents = 2.67 acres of park space per 1,000 residents. 2011 City LOS of 129.4 acres of park space for 28,279 residents = 4.58 acres of park space per 1,000 residents.

TABLE 5: PARK (LOS) BY TYPE

	Neighborhood Park Acreage	Community Park Acreage	Pool #
NPA 1	8.84	42.00	1.00
NPA 2	18.38	0.00	0.00
NPA 3	14.18	0.00	0.00
NPA 4	6.00	40.00	1.00
NPA 5	0.00	0.00	0.00
NPA 6	0.00	20.00	0.00
G.P.A.	37.9	102.00	2.00
CITY	47.4	82.00	2.00

2000 General Plan Study Area: Neighborhood park LOS = 1.07 acres per 1,000 residents; Community park LOS = 2.31 acres per 1,000 residents; Pool LOS = 1 pool per 17,742 residents.

2003 City of Kingman: Neighborhood park LOS = 1.67 acres per 1,000 residents; Community park LOS = 3.60 acres per 1,000 residents; Pool LOS = 1 pool per 11,375 residents.

2011 City of Kingman: Neighborhood park LOS = 1.68-acres per 1,000 residents; Community park LOS = 2.9 acres per 1,000 residents; Pool LOS = 1 pool per 14,140 residents.

EXISTING RECREATION PROGRAMS

Current recreational programs offered by the City of Kingman include youth and adult sports, arts, exercise, and dance classes, aquatic programs, and specialty programs such as cooking, ham radio, and fishing. The department also organizes trips and excursions along with special events such as the Easter egg hunt, mud mania, and parades. All of these programs are intended to serve the diverse population of the Kingman area. Programs are broken down into age groups, with activities planned for every group from toddlers to seniors. User fees are kept to the minimum needed to cover direct costs of the programs, to keep them as affordable and accessible as possible.

EXISTING OPEN SPACE AND TRAIL SYSTEM

Currently, the City owns 3,731 acres of open space as outlined in **Table 6**. Based upon the 2002 population estimate, the City of Kingman open space LOS is 169.25 acres per 1,000 people. Based upon the 2000 census, the Kingman General Plan Study Area open space LOS is 105.15 acres per 1,000 people.

TABLE 6: EXISTING OPEN SPACE AND TRAIL SYSTEM

Area	Size	Improved Trails	Proposed Trails	Other Amenities
Cerbat Cliffs Golf Course	218 acres			18 hole golf course
Cerbat Foothills Recreation Area (CFRA)	5,620 acres BLM 2,073 acres City	Camp Beale Loop(City) Badger Trail(BLM)	Castle Rock Trail (City+BLM)	Improved trail heads with signage and information
White Cliffs Reserve (WCR)	100 acres	Historic Rutted Wagon Trail		Cliff features for repelling
Mohave Wash Trail	5-miles	Concrete trail along Mohave Wash from Airway to Northern Av		Walleck Ranch Park
Hualapai Mountain Park	2300 acres	Trails to various peaks		Camp sites, picnic areas
Windy Point Campground	Cerbat Mtns on BLM Land	Cherum Peak Trail		Campground

PLANNED AND PROGRAMMED PARKS, RECREATION, OPEN SPACE AND TRAILS FACILITIES

PROGRAMMED PARK FACILITIES

Funding since 2007 has been severely limited and capital improvements for parks has been very limited. A 1.65 acre neighborhood park on Sycamore Avenue is programmed. More neighborhood parks and a large 40-acre plus park are demanded but unfunded. A handicap

accessible playground was developed at Southside Park in 2010. A pedestrian crossing from the Powerhouse Visitors Center to Locomotive Park is funded and planned to be completed in 2013. The capital improvements projected in the Parks Recreation Open Space and Trails Plan has been postponed until funding can be identified.

The Kingman Unified School District have a number of recreational facilities, but due to security and maintenance cost issues, non-school related public access to these facilities is limited to supervised programs use by the City Parks and Recreation Department.

The development of a large park that can consolidate soccer fields and be irrigated by treated effluent is proposed. Such a park would need to be located near the Hilltop Wastewater Treatment Plant so the extending of treated effluent water lines can be feasible. No such park is programmed at this time.

PROGRAMMED IMPROVEMENTS TO EXISTING PARKS

Table 8 below indicates improvements to existing parks that are programmed in next 10 years.

TABLE 8: PROGRAMMED IMPROVEMENTS TO EXISTING PARKS

Park Name	Park Type	NPA	Recommended Improvements	Time Line
Southside Park	Community	1	Additional playground equipment, improved parking area, picnic areas, turf and trees, tennis, basketball, and volleyball courts, BMX bike course.	Playground equipment has been installed; remaining improvements by 2020.
Centennial Park	Community	4	Additional playground equipment	By 2018
Neil Butler Park*	Community	6	Turf, trees, irrigation, playground equipment, picnic areas, sport courts and fields.	No annexation therefore no improvements planned.

* If and when this area is annexed into the City of Kingman.

PLANNED NEW PARK FACILITIES

Table 9 indicates new park facilities that are planned to be completed in the next 5-10+ years. The proposed park sites on the map in Figure 1 are intended to show the need for park space within certain areas in various NPAs, and do not represent any specific property, parcel, or land.

TABLE 9: PLANNED NEW PARK FACILITIES

Area	Park Type	Size	NPA	Time Line
Greater Kingman Addition area	Neighborhood Park	5-10 acres	5	By 2020
Kingman Camelback area	Neighborhood Park	5-10 acres	6	By 2023
Lake Mohave Country Club Estates area	Neighborhood Park	5-10 acres	6*	By 2028
Kingman Park Estates area	Community Park	40-50 acres	3	By 2023
Cerbat Cliffs Golf Course area	Neighborhood Park	5-10 acres	2	By 2028
Shangri-La Estates area	Neighborhood Park	5-10 acres	4	By 2028
Vista Bella/Parkway area	Neighborhood Park	5-10 acres	5	By 2028
Sunhaven Homesites area	Neighborhood Park	5-10 acres	6*	By 2028
New Kingman Addition Unit # 10 area	Neighborhood Park	5-10 acres	6*	By 2028
New Kingman Addition Unit # 9 area	Neighborhood Park	5-10 acres	6*	By 2028

* If and when this area is annexed by the City of Kingman.

PLAY LOTS

No play lots are shown on the programmed or planned park facilities tables. However, Monsoon Park, which is the drainage basin in the East Golden Gate Improvement at the northwest corner of Eastern and Southern Avenue is used as a park and is open to the public in non-floodway accumulation periods, which is about 360 days a year. Soccer practice, ice block sledding, water sliding (if a garden hose from a neighboring property is extended). This area can be further developed with some trees. Play lots, in general, are a kind of small pocket park that is intended to fill in the gaps between neighborhood parks. The maintenance cost of small pocket parks are high due to mobilization costs of maintenance equipment and personnel and often discouraged by park maintenance personnel. Other partners including service organizations and private sector businesses can be involved in the establishment of play lots. It is recommended that public

hearings and other forms of citizen input are held prior to the creation of a play lot to ensure strong neighborhood support and commitment to the project.

PLANNED RECREATION PROGRAMS

Future demand for recreation programs is difficult to predict. While existing programs may have a long history of support and involvement, the formulation of new programs is a difficult process. Some broad demographic information may be useful for helping define areas of future interest in recreation programs. Population will continue to grow, both through migration and annexations. Migration will be the more important of these factors because many residents of the unincorporated areas of the City already participate in our recreation programs at the same cost as city residents. The Kingman General Plan Study area grew by approximately 1.2-percent per year between 2000 and 2010.

While youth and adult sports, physical fitness, and travel programs will always have their place in recreational planning, specialty programs for school aged children and seniors may have a higher demand in the future. Examples of these specialized programs include before and after school activities for youth and craft and computer classes for retirees.

The City has two swimming pools. The downtown pool has a wading pool for young children, and is popular to families. The Centennial Park pool is an “Olympic” style of pool with a number of maintenance issues. Both pools are very expensive to operate and maintain. Nevertheless, the pools are very popular amongst the citizenry. The construction of a water park facility would better meet the desires of the community for water recreational activity. However, there are no capital funds available to replace either pool and construct a water park.

PLANNED OPEN SPACE ACQUISITION

The acquisition of open space will continue in the Cerbat Foothills Recreation Area (CFRA) and the White Cliffs Recreation Area. Other areas with potential for open space reserves would include the Bull Mountain area in Kingman Camelback, and the Slaughterhouse Canyon area of Hualapai Mountain Road. Portions of State Trust Section 36, T.22N., R.17W., and all of State Trust Section 2, T.21N. R.17W., should be considered for open space preservation under the Arizona Preserve Initiative program contained in Growing Smarter legislation. In addition, portions of BLM lands in Sections 23, 24, 25, 26, 29 and 30, T.21N., R.16W., as well as Sections 26 and 35 in T.22N., R.17W., may be considered for preservation as well.

PLANNED TRAIL IMPROVEMENTS

The City, in conjunction with the BLM, will continue to plan and develop multiple use trails in the CFRA, based upon the management agreement signed by both entities. Trails should also be extended from the CFRA into the developed portion of the City in the area of Canyon Shadows. Trails are also needed in the White Cliffs Reserve Area. These trail systems could ultimately be linked in with the Mohave Wash trail project and other multiple use paths proposed in the Stockton Hill Road/I-40 area.

The connection of the CFRA trails to the urban paths of the Mohave Wash and other area projects would create a regional trail system that could extend from the Hilltop wastewater treatment plant northeast of Kingman, to Golden Valley to the west of Kingman, approximately 15 miles. This type of trail and path system links open space areas and assures future access for the citizens of Kingman. This system will also connect to developed park sites, creating linear parks along transportation, utility and drainage corridors. Park sites will have amenities for trail users, such as parking, restrooms, drinking fountains, and shade, serving trail-heads.

The entire existing programmed and planned trail system shown in **Figure 2** extends approximately 40 miles. The proposed trail locations shown in **Figure 2** are intended to represent the general location of proposed trails and do not represent any specific property, parcel, or land.

PROGRAMMED AND PLANNED PARK FACILITIES FOR THE YEAR 2013

Since the **General Plan** was adopted in 2003. If all the programmed and planned new park facilities called out in this plan were completed in ten years, which would be 2013, the park acreage would be as shown in **Table 10**. The Level of Service for each park type in 2013 is indicated in **Table 11**.

TABLE 10: YEAR 2013 PARK ACREAGE BY GENERAL PLAN NEIGHBORHOOD PLANNING AREA (NPA)

	Park Type	#	Acreage	Total Acreage
NPA 1	NEIGHBORHOOD PARK	4	8.84	50.84
	COMMUNITY PARK	1	42	
	POOL	1		
NPA 2	NEIGHBORHOOD PARK	3	23.38-28.38	23.38-28.38
NPA 3	PLAY LOT	1	2.00	47.68-57.68
	NEIGHBORHOOD PARK	2	5.68	
	COMMUNITY PARK	1	40-50	
NPA 4	NEIGHBORHOOD PARK	4	12.65-17.65	52.65-57.65
	COMMUNITY PARK	1	40.00	
	POOL	1	1.00	
NPA 5	NEIGHBORHOOD PARK	1	5.00-10.00	5.00-10.00
NPA 6	NEIGHBORHOOD PARK	2	10.00-20.00	30.00-40.00
	COMMUNITY PARK	1	20.00	
G. P. A.				209.55-244.55
CITY				171.55-214.55

Year 2011 G.P.A. LOS of 209.55-244.55 acres of park space per 55,913 residents = 3.75-4.37 acres of park space per 1,000 residents.

Year 2011 Citywide LOS of 171.55-214.55 ac. of park space for 28,279 = 6.07-7.59 ac. of park space per 1,000.

The growth rate is expected to continue to grow at 1.2 percent annually. The park system is not able to handle current demand and the problem will only become more intense as the community grows. With continued reduction of State shared revenues and the reluctance to increase local taxes, the City will continue to experience pressure to develop more park facilities. Utilization of land, such as drainageways like Mohave Wash is a partial option, but the capital costs to develop these areas and the operational costs to maintain additional park facilities continues to plague the City under its current revenue structure. Citizen support is needed to increase the revenue structure for the parks and recreation system.

The 2000 Parks Recreation Open Space Trails Plan was based on the assumption that the Kingman area would grow at a four percent growth rate from 2000 to 2013. The area actually grew at an annual rate of 1.2-percent. Regardless, the parks, recreation, open space and trails needs continue to exist because the City was unable to fund its parks system in proportion to the 1.2-percent growth rate. Capital improvements planned within a 10-year timeframe from 2000, are now projected to be in a 15-year timeframe beginning in 2013.

TABLE 11: YEAR 2028 PARK (LOS) BY PARK TYPE

	Neighborhood Park Acreage	Play Lot Acreage	Community Park Acreage	Pool #
NPA 1	8.84	0.00	42.00	1.00
NPA 2	23.38-28.38	0.00	0.00	0.00
NPA 3	5.68	2.00	40.00-50.00	1.00
NPA 4	12.65-17.65	0.00	40.00	1.00
NPA 5	5.00-10.00	0.00	0.00	0.00
NPA 6	10.00-20.00	0.00	20.00	0.00
PLAN AREA (GPA)	65.55-90.55	2.00	142.00-152.00	3.00
CITY	60.55-80.55	2.00	122.00-132.00	3.00

Year 2028 GPA play lot LOS = 0.03 acres per 1,000 residents.
 Year 2028 GPA neighborhood park LOS = 1.11-1.53 acres per 1,000 residents.
 Year 2028 GPA community park LOS = 2.40-2.57 acres per 1,000 residents.
 Year 2028 GPA pool LOS = 1 pool per 19,694 residents.
 Year 2028 City play lot LOS = 0.05 acres per 1,000 residents
 Year 2028 City neighborhood park LOS = 1.65-2.20 acres per 1,000 residents.
 Year 2028 City community park LOS = 3.33-3.60 acres per 1,000 residents.
 Year 2028 City pool LOS = 1 pool per 12,226 residents.

MAINTENANCE

New park facilities will incorporate low-maintenance features to address maintenance and vandalism issues from the onset. Signage will be low maintenance and protected from vandalism. Low water use plants will be used, along with drip irrigation systems. All buildings, by design, will be a low maintenance issue for the City of Kingman Parks Department. Concrete block buildings may be stained instead of painted which penetrates the porous block and eliminates the need for annual painting. The blocks may also be sealed with an anti-graffiti resistant material. Ground surfaces around buildings will be poured in place concrete instead of asphaltic mixtures, this leads to an extremely low maintenance walkway that requires no periodic resurfacing. Low water use plumbing fixtures will be stainless steel, which is resistant to vandalism.

Fencing repair, trail maintenance, sign maintenance, and litter control are all maintenance issues associated with open space areas. Other trail amenities including benches, mile markers, bike racks, and hitching posts may also require periodic maintenance. Due to the remoteness of portions of our hiking trails, there is potential for vandalism. As a rule, vandalism decreases in popular and frequently used open space areas and trails. Our existing trail system appears to be popular, and vandalism has not been a major issue. However, vandalism and regular maintenance should be considered as our trail system expands.

SAFETY AND SECURITY

Local safety and law enforcement is an important concern during the design and construction of any new park projects. Police and Fire staff is involved from the beginning to review design plans for any new park along with individual elements of the proposed park. Based on past experience and the expertise of the designers along with our Parks, Police, and Fire staff, we are able to address safety, first-aid, and law enforcement problems before, rather than after they occur.

Any future park site plan will incorporate safety features such as separating sports areas from picnic and playground areas. Parks will also be designed to allow emergency vehicle access. Security lighting will be designed into any restroom buildings. In general, park design will allow for an unobstructed visibility of the area. This visual openness will enhance the safety of the users of the facility, as well as aiding Police and Park personnel in monitoring activities within the park, thus reducing the potential for vandalism or other criminal activity. Vandalism resistant materials will be used in restroom buildings including stainless steel plumbing fixtures, and block construction. Buildings will have public telephone access for emergency response.

Safety and security in open space areas and on trails is also an important issue. Aside from criminal activity, emergency medical responses may be required due to heat, exposure, injury, or snake bite. Our urban, improved path system will be patrolled by the Police Department's bike patrol. In the more remote open space reserves, police patrol will be less frequent. Officers will check trail head location from time to time. The Mohave County Sheriff's Office has a helicopter and search and rescue team.

PROJECT COSTS

Sample costs for neighborhood park design and development are shown in **Table 12**. The cost of acquiring park space varies widely, and is based on appraised value which considers contributing factors such as access, infrastructure, location, and size. Park space acquisition can be costly because sites with good amenities are also attractive for other forms of development. Many of our existing park sites have characteristics such as drainage patterns that would make them less desirable to develop as other uses. The costs of recreational programs vary widely, with more expensive activities necessitating higher user fees. Like park sites, open space acquisition is also based on appraised valuation. Generally, open space areas should be cheaper than park space. These properties probably won't have the access, infrastructure, and location that would make it attractive for other types of development. The total cost of recent open space acquisitions have ranged from \$500.00 to \$2,500.00 per acre. Recent experiences with trail development indicate that one mile of trail costs approximately \$ 11,000.00 for construction labor. Other costs including a vehicle, gasoline, and trail-head amenities like signage and benches are not included in this figure.

TABLE 12: SAMPLE PARK DEVELOPMENT COSTS

Project Scope Items	Number of Units	Unit Cost	Total Item Cost
Curb & Sidewalk	500 L.F.	\$ 33.17	\$ 16,750.00
Driveway & Parking Lot	1 L.S.	\$ 32,500.00	\$ 32,500.00
Restroom Building	480 S.F.	\$ 104.00	\$ 50,000.00
Ramada	400 S.F.	\$ 62.50	\$ 25,000.00
Multi-Use Court	4,700 S.F.	\$ 5.32	\$ 25,000.00
Playground Equipment	1 L.S.	\$ 12,000.00	\$ 12,000.00
Barbeque Grills	3	\$ 350.00	\$ 1,050.00
Picnic Tables	6	\$ 650.00	\$ 3,900.00
Horse Shoe Pits	2	\$ 1,000.00	\$ 2,000.00
Landscape(trees, shrubs, decomposed granite, and turf)	1 L.S.	\$ 115,000.00	\$ 115,000.00
Irrigation	1 L.S.	\$ 40,000.00	\$ 40,000.00
Mobilization	1 L.S.	\$ 7,500.00	\$ 7,500.00
Clear & Grub	1 L.S.	\$ 3,500.00	\$ 3,500.00
Construction Administration	1 L.S.	\$ 50,000.00	\$ 50,000.00
Design	1 L.S.	\$ 40,000.00	\$ 40,000.00
TOTAL			\$ 424,200.00

L.F. = lineal feet; L.S. = lump sum; S.F. = square feet

FUNDING AND ACQUISITION SOURCES

Funding for parks, recreation, open space, and trails can come by various means. Following are means to acquire and a parks system:

DONATIONS. At times property owners are willing to donate land and monies for park and open space development. These donations come on a sporadic basis and at times the land offered for donation are not conducive to park development.

LAND TRANSFER. At times another governmental agency has property that it is willing to transfer to a local government for park development. For example, the Arizona Department of Transportation has provided land to the City of Kingman for park and trail development.

EXACTION. The judicial decisions in land use cases have made it clear that the governments must demonstrate a rational nexus to exact land for parks and open space. There must be a "rough proportionality" to the impact of the development in relation to the amount of land exacted. Small developments only allow small amounts of land that often are not useful or functional for a parks system. Large developments can provide sufficient land for a neighborhood park, but much of the development in Kingman is small in scale.

GRANTS. There are various grant programs through the State and Federal governments as well as private foundations that provide monies to acquire and construct park lands. The City has been successful in securing such grants to build trails and playgrounds.

BONDING. The City could go to the voters for a general obligation bond for fund park improvements and park land development.

GENERAL FUND BUDGETING. If the City were to have sufficient monies through its existing revenue sources, monies could be budgeted for park land acquisition and development.

1. PURPOSE AND SCOPE OF THE REPORT

This report is prepared for the purpose of providing information to the Board of Directors regarding the financial performance of the Company for the year ended 31st December 2012. The information is intended to assist the Board in its decision-making process and is not intended to constitute an offer of securities or any other financial product.

The information contained in this report is based on the financial statements of the Company for the year ended 31st December 2012, which have been audited by the independent auditors. The auditors have expressed their opinion on the financial statements in their audit report, which is included in this report.

The information contained in this report is also based on the information provided by the management of the Company. The management has provided this information to the best of its knowledge and belief, and has accepted responsibility for its accuracy and completeness.

The information contained in this report is also based on the information provided by the various departments of the Company. The management has provided this information to the best of its knowledge and belief, and has accepted responsibility for its accuracy and completeness.

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CHAPTER 8

COST OF DEVELOPMENT ELEMENT

INTRODUCTION

The *Cost of Development Element* is one of the elements required by the Arizona Revised Statutes. The *Cost of Development Element* should be used in conjunction with the other elements of the Kingman General Plan 2030 Update to guide the physical development of the City. This element includes policies and strategies that the City may use to require development to pay its “fair share” compensation toward the cost of additional public service needs generated by new development.

The *Cost of Development Element* includes:

- A.) A component that identifies various mechanisms that can be used to fund additional public services necessary to serve new development, including, but not limited to: bonding, special taxing districts, development fees, in lieu fees, facility construction, dedications, and service privatization.
- B.) A component that identifies policies to ensure that any mechanisms adopted by the City of Kingman under this element result in a beneficial use to the development and bear a reasonable relationship to the burden imposed on the City to provide the additional public services.

FUNDING MECHANISMS

In order to achieve Kingman’s goal of meeting the needs of our growing community, the City must continue to expand public infrastructure and facilitate services. It is important that the City establish specific policies, plans and strategies that can be implemented with community support to address financial needs and achieve stated community goals.

With continued growth, Kingman has made efforts to fund increases in the number of police and fire personnel, and other employees, services and facilities. City facilities and services are funded through the general fund and some special grants. The general fund is funded through sales tax revenues, which are the largest source of revenue, and other population-based revenues from the State or through payment for City services. Sales tax revenue tends to be unpredictable due to fluctuating economic conditions such as employment rates, stock market changes, and tourism levels.

A significant amount of funding for the City of Kingman comes from State Shared Revenues. Historically, instead of the local governments collecting monies for road improvements, it was agreed amongst the State of Arizona and local governments that the State would collect Highway User Revenue Funds and share with local governments. Due to State of Arizona budget shortfalls, the distribution of these funds to local governments has been significantly reduced so the State would not have to increase its taxation of the taxpayers in the State and leave such a burden to the local governments.

The City of Kingman does not levy a property tax on its residents and depends on State share revenues, sales tax, user fees, and grants to fund its operations and capital improvements. The reduction in sales tax revenues and State shared revenues has significantly reduced the City's capital improvements program.

OVERVIEW OF FUNDING MECHANISMS

Under Arizona statutes, there are a number of options available to Kingman to fund infrastructure and public facilities that are necessary to service new development. An overview of these mechanisms follows:

Community Facilities Districts

Community Facility Districts (CFD) may be formed by cities or towns, but not counties. They may be used for specific public improvements including roadways, water and sewer, pedestrian ways and malls, landscaping, lighting systems, traffic control, public buildings and sites, schools and sites, parks and sites, and public recreational facilities. Community Facility Districts must rely on the revenue generated by the property tax generated in the district and cannot turn to the City's general fund if there is a shortfall in revenue. This source of funding is often used when a large commercial development is anticipated that will generate sufficient revenues to fund the public infrastructure funded by the CFD.

Improvement Districts

Improvement Districts may be formed by cities for projects that provide specific community benefit such as roadways, water, sewer, streetlights and parking facilities. While counties may form an improvement district to establish and maintain a park or recreation area for the benefit of the property within the district, the statutory list of improvements financed and constructed by a municipal improvement district does not include recreational facilities. In Kingman improvement districts have been used extensively to make capital improvements in older subdivisions. The use of improvement districts has proven to be a highly successful method of promoting residential infill in Kingman, although subject to some controversy regarding the number of lots placed on the market at one time. It should be noted that Arizona case law has not supported school improvements as part of municipal improvement districts. Declining property values have resulted in numerous defaults in improvement district payments, which have caused the City to absorb defaulted costs and auction property in an attempt to recoup the defaulted assessments.

Development Agreements

Development agreements are permitted under A.R.S. 9-500.5 for municipalities. Development agreements permit contractual arrangements between the City and property owner(s) regulating the permitted uses, density, maximum height, and other aspects of the land subject to the agreement. Advantages of development agreements are that they are voluntary and, therefore, mutually agreeable to all parties involved in the negotiations. Also, they can enable the City to attain planning goals at minimal or without costs.

Development Impact Fees

The Arizona State legislature in 1982 passed specific legislation permitting cities and counties to impose development impact fees on landowners in a “benefit area” to offset costs incurred by the municipalities in providing necessary infrastructure needs and public services for new development. This state law requires documentation of projects to be financed by development impact fees prior to their levy and collection, and that the monies collected are actually committed within five years to a project of “direct benefit” to the development which paid the fees. In addition, the amount of development impact fees must bear a reasonable relationship to the burden imposed upon the municipality to provide additional necessary public services to the development. (A.R.S. § 9-463.05(B) 4) A development should receive a beneficial use from the results of the fees.

Kingman implemented a development impact fee program with the passage of Ordinance #1529 on March 6, 2006; this ordinance became effective July 1, 2006. This program collected monies to pay capital improvements through a development investment fee program. This program assessed development investment fees on building permits depending on the impact the use of the structure would have on the public infrastructure. The impacts were determined by a report known as the “Revenue and Fee Study, General Fund Fees and Charges, Final Report, October 2005”, which was prepared by Red Oak Consulting, a division of Malcolm Pirnie, Inc. This report assessed the impact that growth would have on stormwater facilities, general government facilities, parks and recreation facilities, police facilities, fire protection and suppression facilities, water infrastructure, sewer facilities, and streets and transportation infrastructure. The monies were used to benefit the developments from which the fees were collected. The City Council determined that the area of benefit was the City as a whole. The development investment fees were placed in a separate fund and accounted for separately. The monies, with the accrued interest were used only for the purposes authorized. The development investment fees were paid when building/construction permits were issued. Credits toward development investment fees were granted when there was a required dedication of public sites and improvements provided by the developer for which the fee is assessed. The development investment fees were required to and did bear a reasonable relationship to the burden of providing additional necessary public services to the development; and be assessed in a nondiscriminatory manner.

The Arizona Legislature continued to modify the development fee legislation (Arizona Revised Statutes §9-463.05) to the point that with the passage of Senate Bill #1525 in 2011 caused the City Council repealed the development investment fee program, with the exception of the wastewater impact fee, effective January 1, 2012 (Ordinance #1723).

Dedications

A dedication is a conveyance of land by a private owner in the nature of a gift or grant and the acceptance of that land by a public entity. Streets in a subdivided development are usually acquired through a dedication to the public of the property comprising the streets. Other dedications may include land for parks and recreational facilities, school sites, bike paths, or local transit facilities.

Exactions

An exaction is a payment or dedication made by a developer for the right to proceed with a project requiring government approval. They can be in the form of a fee, the dedication of public land, the construction or maintenance of public infrastructure, or the provision of public services. The purpose of the exaction must be directly related to the need created by the development. In addition, its amount must be proportional to the cost of the improvement. Exaction cannot be administratively imposed but must be authorized by City Council legislative action. With the elimination of the Development Investment Fee Program, except for wastewater impact fee, an exaction program may be viewed as a means to secure land for public facilities that the proposed development's impact will demand. Park land, site for public safety facilities, and stormwater facilities are examples of facilities that land will be needed. An exaction must be proportional to the impact. Therefore when a development takes place in small increments, exacting sufficient land to develop an adequate sized park and other public facility requires negotiation with the property owner.

Franchise Tax

The franchise tax is based on the gross sales of the local utility companies that serve Kingman customers. Those that currently pay the franchise tax are: Unisource Electric (2%), Unisource Gas (2%), and Suddenlink Cable (5%). The revenue raised from franchise fees could be earmarked to fund capital projects but is normally used for General Fund operations. Frontier Communications is not charged a franchise fee but rather its customers pay a sales tax on its services.

General Obligation Bonds

General obligation bonds are a flexible financing option for the City, spreading the benefits and burdens of the fund uniformly throughout the community and can be used for almost any capital purpose. This often includes cost intensive capital improvements such as roads, parks, and sewer facilities and equipment. As of 2013, the City of Kingman had no outstanding general obligation bonds.

General obligation bonds are somewhat restrictive however, because voter approval is required to authorize the issuance of bonds. This can be time consuming and costly. Additionally, because costs are spread uniformly throughout the community, infrastructure to support new development may be unfairly subsidized by existing development.

Motor Vehicle In-Lieu Revenue

Motor vehicle license taxes are collected by the state. The City receives its share of the vehicle license tax collected based upon its population in relationship to the total incorporated population of the county. Historically, this revenue source has been highly erratic and susceptible to economic change, and legislature whim.

Permit Fees

Revenues from permit fees include fees collected from building permits, zoning fees and a variety of other programs. Normally these are not earmarked but fund operations. These fees generally do not cover the costs of the services provided.

Revenue Bonds

Revenue bonds are issued by a municipality and backed by a dedicated revenue stream. Improvements to existing sewer facilities are often made utilizing revenue bonds because there is a steady revenue stream from the utility users to attract bond buyers. Revenue bonds do not require voter approval and the constitutional debt cap do not apply to the issuance of revenue bonds. Municipalities with population of 75,000 or less may issue revenue bonds for utilities and recreational facilities, which include swimming pools, parks, playgrounds, municipal golf courses, and ball parks.

State-Shared Sales Tax and Income Tax Revenues

Revenue includes the state sales tax and income tax collection, which are shared with cities and towns, based upon population. Cities and towns share in a portion of the 6.85-percent sales tax collected by the state. Fifty percent is retained by the state, 40 percent is designated for schools and the remaining 10 percent is allocated to cities and towns.

Cities and towns in Arizona are prohibited from levying an income tax, but are entitled to 15 percent of state income tax collected from the previous two years.

The formula for distributing these taxes is based on the relation of the City's population to the total state population. The State Department of Revenue collects, distributes funds, and provides revenue forecasts to cities and towns for these revenue sources. State-Shared Revenues are extremely susceptible to Legislative budget whims. The State of Arizona has experienced budget shortfalls and State Shared Revenue distribution to the local governments has been adversely impacted.

Specialty Industry Tax

Specialty industry taxes, such as bed taxes have been used to fund a variety of public services and facilities around the State of Arizona. Cities do not need legislative authorization or voter approval to enact a specialty industry tax, while counties must have legislative authorization. Advantages to a specialty industry tax are that the local residents do not pay the tax and voter ratification is not required. Kingman currently has a four-percent (4%) on bars, restaurants, cocktail lounges, and similar establishments where food and beverages are served, commonly referred as the restaurant and bar tax. Of this four-percent of "restaurant and bar" revenue, one-

fourth of the revenues are dedicated to street repair and maintenance. On July 1, 2013, the City reduced this tax to three-percent (3%).

The City assesses a four-percent (4%) bed tax on lodging uses (Ordinance #1668). Half of the revenues traditionally funds Tourism Development Commission activities, although there is no mandate of this allocation. The remaining half of this revenue is to fund capital projects (Ordinance #1668).

Transaction Privilege (Sales) Tax

The Arizona transaction privilege tax is commonly referred to as a “sales tax”; however, the tax is on the privilege of doing business in Arizona and is not a true sales tax. This tax is levied on the seller, not the purchaser. The seller may pass the burden of the tax on to the purchaser; however, the seller is ultimately liable to Arizona for the tax. Aside from the state tax rate, the City may impose a transaction privilege or sales tax within its jurisdiction to fund the costs of a variety of public services. The City currently has a sales tax of two-percent. Starting June 1, 2013, the State of Arizona reduced its transaction privilege tax rate from 6.85-percent to 5.85-percent. Beginning July 1, 2013, the City raised its sales tax rate by 0.5-percent to make the City’s sales tax rate 2.5-percent.

Transportation Revenues

Transportation revenues include Highway User Revenue Fund (HURF - Gas tax) and Local Transportation Assistance Funds (LTAF - State Lottery) and vehicle license taxes collected by the state. A state constitutional restriction on use of the HURF required the funds to be used solely for street and highway purposes. LTAF is used to fund transit systems.

HURF revenues are distributed based on population and cities and towns participation in the lottery. The LTAF revenue sharing was capped in 1989 by the state legislature resulting in no growth in this source of revenue. The State of Arizona retained a significantly higher portion of these revenues to fund its transportation operations without raising taxation. This action left a reduction in revenues to the local governments and therefore caused the City of Kingman to increase sales taxes and specialty taxes to maintain its roads and to fund street improvements.

Transportation Enhancement Funds

Transportation enhancement funds include grants such as ISTEA which may be used for inter-modal transportation development. These funds in recent years have been used in Kingman for such items as the Mohave Wash Enhancement Project, Beverly Avenue sidewalk improvements and the Hualapai Mountain Road Enhancement Project.

User Fees

User fees are assessed for the specific use of a service or activity. An example is a fee charged for admission to a state or county park or fees charged for recreation facilities and programs. A user fee can be employed to defray a portion or the entire cost of a project. The advantage of a user fee is that the person using the specific service incurs the charge. In Kingman user fees are most associated with recreational activities. As a result of \$55 millions upgrades to both

wastewater treatment facilities to meet Arizona Department of Environmental Quality standards and also to meet present and future treatment capacity demands, wastewater utility rates have increased about 25-percent starting in January 1, 2012. Another increase of 25-percent was effective beginning January 1, 2013. As more wastewater users connect to the wastewater system the base rate may decrease.

OTHER FUNDING OPTIONS

Certificate of Participation

Under this method of financing, private parties purchase Certificates of Participation (COP), which are the equivalent of tax-exempt bonds and represent an ownership interest in property belonging to a local government. The property is then leased back to the local government, which makes “lease” payments to the COP holders to cover the bond program. The City used a form of a COP during the Cerbat Cliffs Golf Course expansion in the mid 1990s, but currently does not have any Certificates of Participation. Mohave County used a COP for the Griffith Area water system.

Concurrency Requirements (Adequate Public Facilities)

The pressures of growth and concern about urban sprawl have encouraged some communities and states to adopt “concurrency” ordinances. Concurrency ordinances are intended to ensure that growth cannot occur in an area unless adequate public facilities are either in place, planned or occur concurrent with proposed development. These programs have generally been adopted generally in urban areas to prevent unacceptable declines in the provisions of services to existing residents and to meet the demands of new residents. A key point is that, in its pure form, concurrency does not require that new development be paid for by developers, only that the required improvements be made prior to or concurrent with the development. The question of financing the improvements is related to impact fees and other funding mechanisms. The State of Florida has the most stringent State-wide requirements on “concurrency”.

Enterprise Funds

Enterprise Funds include fees collected for City water, sewer, and sanitation services that are used to fund certain infrastructure expansion and capital improvements.

Other Funding Mechanisms

Various funding mechanisms are available mostly in the form of loans and debt financing bonds through the state. These include the GADA and WIFA loans for various infrastructure improvements as well as the Industrial Development Authority (IDA) and Municipal Property Corporation for municipal facilities.

Property Tax

A property tax is a tax levied on land and improvements on a specific parcel of land. For many communities, it is their primary source of revenue. While Mohave County and all school districts levy a primary property tax, which can be used to fund operating expenses. Most recently, the City of Kingman had a ballot proposition to consider a primary property tax in

November, 2007 that was turned down by the voters. Therefore, currently there is no city primary property tax. Cities can levy primary property taxes to fund maintenance and operation of municipal government services. Primary property taxes may not exceed the municipality's levy limit. Costs associated with public infrastructure funding are funded by secondary property taxes, which are levied back to general obligation bonds issued by a municipality. Secondary property taxes are not subject to the levy limit. However, the municipality may not issue general obligation bonds in excess of its constitutionally set debt cap. Thus, while municipalities may not set a primary property tax or create a new property tax over its levy limit, it can, once it receives voter authorization to issue general obligation bonds, levy property taxes that are not subject to the levy limit as necessary to cover the bond obligation.

CURRENT CONDITIONS

The City of Kingman relies primarily on sale tax, state shared revenue and various fees to fund operations. A primary property tax was levied by the City in the 1970s, but was discontinued. The total General Fund budget for fiscal year 2012-2013 is \$25,740,010, an increase of approximately \$1.033 millions from the previous fiscal year's estimated budget.

Local revenues include the two-percent sales tax, four percent room tax, two-percent restaurant and bar tax, utility franchise fees, business license fees, parks and recreation fees, building permit and inspection fees, and police and fire service charges. These fees represent revenue of \$14,423,000 or 67.66-percent of the General Fund revenue sources for Kingman. The local privilege tax (sales tax) is Kingman's single largest source of revenue and is obtained from the 2 percent tax on retail and other sales, excluding food. Half of the room tax is used by the Tourism Development Commission to fund various projects designed to enhance tourism and the economic development of the Kingman area. The City utilizes the franchise fees and business license fees for General Fund operations.

State-shared revenue sources include the state sales tax, income tax, and auto lieu tax, which are shared with cities and towns based upon a formula which relates the City's population to the total state population. The State Department of Revenue collects, distributes sales and income tax funds, and provides revenue forecasts to cities and towns for these income sources. Kingman receives a portion of the auto lieu tax collected by each County based upon its relationship to the total incorporated portion of the county. In fiscal year 2012-2013 the state-shared revenue was budgeted at \$5,160,000, an increase of approximately \$633,000 from the previous fiscal year's estimated budget.

A number of special revenue funds in the City's budget are used for a wide variety of purposes. The Arizona Department of Revenue also collects and distributes transportation revenues including the highway user revenue tax (HURF - gas tax) and local transportation assistance funds (LTAF - State Lottery). A state constitutional restriction on the use of the HURF and LTAF requires the funds to be solely used for street and highway purposes. HURF revenues are distributed based on population and cities and towns participation in the State Lottery. The LTAF revenue sharing was capped in 1989 by the state legislature resulting in no growth in this

source of revenue. The fiscal year 2012-2013 budget estimated an 8.3% decrease in state-shared HURF revenue and LTAF revenue as compared to the previous fiscal year. Kingman uses HURF and the lottery funds for various street maintenance purposes and street and sidewalk improvements.

Other special revenue funds include Grant Funds for various CDBG projects, capital improvements such as the railroad depot, and trails and park improvements, the Improvement District Bond Repayment Fund, Benefits Reserve Fund, and the Transit System Fund.

Kingman's Enterprise Funds is comprised of Water Funds, Wastewater Funds and the Sanitation Fund. The Water and Wastewater Operating Funds revenues are primarily from residential and commercial water and sewer service fees as well as water meter connection fees. The City also collects water expansion fees to help fund various water system expansion projects. The Colorado River Water Fund provides funding for a number of well and water transmission projects. The wastewater plant expansion was funded through the Wastewater Infrastructure Finance Authority of Arizona and through the only remaining development investment fee in the City of Kingman. The sewerage collection system line repair and replacements were funded with sewer use fee revenues and expansion is funded by developers and grants. Finally, the Sanitation Operating Fund collects revenues from fees that all water customers pay on a monthly basis. The fees are used for personnel, supplies and service and capital expenses associated with sanitation services.

Capital improvements have been funded largely through room tax revenues and grants. The revenues collected for flood control purposes, which included rights-of-way for drainage corridors which are funded through the Mohave County Flood Control District property taxes.

CHAPTER 9

ENVIRONMENTAL PLANNING

ELEMENT

INTRODUCTION

The **Environmental Planning Element** is one of the elements required by the *Arizona Revised Statutes*. This element is required to contain analysis, policies and strategies to address anticipated effects, if any, of plan elements on air quality, water quality and natural resources associated with proposed development under the General Plan. The policies and strategies to be developed under this element shall be designed to have community-wide applicability and shall not require an additional environmental impact statement or similar analysis beyond the requirements of state and federal law.

MAJOR ISSUES

AIR QUALITY ISSUES

The City of Kingman and the surrounding areas within the Kingman General Plan Study Area have experienced steady, sustained growth for over the past 25-years. In 1990, the population within the City of Kingman was 13,769, and by the year 2000 the population had risen to 20,069; an average annual increase of 3.84. The 2010 census for Kingman was 28,068, an annual growth rate of 3.41-percent for this 10-year period and with the 2012 population estimate of 28,335. Over the previous 30 year period, the average growth rate was 2.44-percent. The New Kingman/Butler CDP, which includes much of the area north of Kingman that lies within the General Plan Study area, had a population of 11,627 in 1990. This population rose to 14,810 in 2000; an average annual increase of 2.45-percent. In 2010, this area had a population of 22,764. The entire General Plan Study Area is, therefore, estimated to have had a population in the year 2010 of 62,236. This would mean the Study Area as a whole experienced about a 5.78-percent annual population growth between 2000 and 2010.

As the population has grown, automobile traffic and construction have increased as well in the area. Anecdotal evidence points to automobiles and construction sites as primary sources of air pollution in the Kingman area. Dust, by far, appears to be the main pollutant. This appears to be caused primarily by increased vehicular traffic, particularly on unpaved roads in the area, as well as from construction sites in which properties have been clear-graded prior to the construction phase. A secondary source of air pollution appears to be from regional forest and brush fires which can send smoke into the Kingman area from as far away as Southern California. In general, however, air quality remains good in the Kingman area and is assisted by frequent strong prevailing winds.

WATER QUALITY ISSUES

The City of Kingman supplies water throughout the Kingman General Plan Study area. The area relies entirely on groundwater as there are no surface water sources. In the year 2000, the City's municipal water system included 15 active well sites and an above-ground water storage capacity of 10 million gallons of water stored in 10 storage tanks. The source of this groundwater lies in two basins: the Upper Hualapai Basin and the Sacramento Basin.

The effect of any point and non-point pollution sources on this valuable groundwater source is critically important to the continued well-being of residents and to future growth of the area. Most of the potential pollution to the groundwater would be expected from non-point sources such as roadway runoff. Chemical analysis of wells in the Kingman Water System are completed frequently and annual consumer confidence reports regarding these tests are sent to the public and are available from the City Water Department.

NATURAL RESOURCE AND ENVIRONMENTAL ISSUES

The City of Kingman lies between the Cerbat and Hualapai Mountain ranges at an elevation ranging from about 3,300 feet in the downtown area to over 3,800 feet in Hualapai Foothills area. Elevations within the Kingman General Plan Study area range from near 3,000 feet in the southwestern portion to over 5,000 feet near the southeast corner. The high desert climate is characterized by generally dry weather, frequent sunny days and good visibility. The area experiences warm summers, mild springs and falls and cool winters with frequent strong prevailing winds primarily from the southwest and northeast. There are infrequent rains in the form of thunderstorms mainly between July and September and lighter showers and occasional snow mainly between November and March.

The Kingman area lies in a transition area between the Mohave Desert to the northwest and the Sonoran Desert to the southeast. Plant communities of both deserts appear in the Kingman area including creosote, mesquite, cholla, yucca, prickly pear, and other desert scrub and grasses. Wildlife in the area is that typically found in similar desert areas including desert tortoises, various snake species, coyotes, rabbits, skunks, deer, and quail.

The Kingman General Plan Study area is dominated by five soil types including: Parajito Gravelly Sandy Loam, Tres Hermanos, House Mountain Cerbat Rock Outcrop, Bucklebar Sandy Loam, and Cherum-Hayhook. The Parajito Gravelly Sandy Loam and Cherum-Hayhook soil types are best suited for urban development as these soils are deep and well drained, in areas of 0-3% slopes with a slight risk of water erosion. The House Mountain Cerbat Rock Outcrop soil type is poorly suited to urban development as this soil is very shallow but well drained, in areas of 10-35% slopes with a moderate risk of water erosion. The main development limitations are the steep slopes and shallow depth to bedrock which affects the use of septic tank absorption fields.

The Kingman General Plan Study area lies within two drainage basins. The Mohave Channel basin has a drainage area of 168 square miles and extends to the Hualapai Mountains on the southeast and the Cerbat Mountains on the west. This part of the much larger Hualapai Valley basin which is 1,820 square miles in size. The Johnston Canyon basin has a drainage area of 12 square miles which includes the developed downtown area. This basin is part of the larger Sacramento Valley basin which covers about 1,400 square miles in western Arizona.

Portions of the Kingman area lie within several flood zones as identified by the 2009 FEMA Flood Insurance Rate Maps. Certain areas have been identified as frequently subject to flooding in the Mohave Channel basin including Fairgrounds Boulevard, Bank Street, Stockton Hill Road, Sunrise and Western Avenue. Areas subject to flooding in the Johnston Canyon basin include First Street and Andy Devine, Eighth Street and the railroad underpass, Sixth Street south of the railroad and the Kingman High South Campus area. Risks of flash flooding and erosion clearly exist in the Kingman area, particularly in steep slope areas.

THE IMAGE OF KINGMAN, ARIZONA

Kingman's image has been described in the Kingman General Plan 1990-2010 and Kingman General Plan 2020 with certain environmental and physical qualities which include:

- | | |
|---------------------|--|
| Open Space Feeling: | Non-confining, expansive, uncrowded. |
| Views: | Mountains, buttes, unobstructed, sense of place. |
| Climate: | Mild winters, warm summers, seasonal gusting winds |
| Sky: | Bright, clear, blue, cloudless |
| Sounds: | Quiet, tranquil |
| Development: | Low density, compact Downtown, single story. |
| Heritage: | Railroad, mining, ranching, Native American, spirit of the west. |

These elements combine to form Kingman's own unique image. They have influenced and continue to affect Kingman's development patterns. Integrated planning and foresight can be used to protect and enhance the very qualities that make up Kingman's identity.

IDENTIFIED MITIGATION MEASURES

There are a number of existing policies and ordinances which may be used to mitigate problems and enhance air quality, water quality and natural resources associated with development within the Kingman General Plan Study Area.

AIR AND WATER QUALITY MITIGATION MEASURES

Some policies and ordinances available to the City of Kingman to mitigate damage to air and water quality include: Providing opportunities for alternative means of transportation beyond the use of the automobile which causes air pollution. Non-polluting transportation methods include walking and bicycling, while the use of transit can reduce the number of vehicles on the road, thus reducing the number of potential pollution sources. The City can also use existing ordinances and policies to reduce dust pollution from such sources as unpaved roads and parking lots, construction sites and clear graded areas. Water quality can be maintained by continuing to frequently monitor well sites and identifying methods to prevent non-point pollution sources.

NATURAL RESOURCE PROTECTION MEASURES

Methods to protect the natural resources as well as provide for the wise development of the area include: Enforcement of the City's Hillside Ordinance which restricts grading in areas of steep slopes which generally have poor soil conditions for development. Continue to implement the Kingman Master Drainage Plan which is designed to protect development from flood hazards, erosion, and nuisances. Provide methods to conserve existing resources such as water and energy. Educate the community concerning environmental issues such as the need to reduce solid waste streams and decrease the problems of littering in the area.

METHODS TO ENHANCE KINGMAN'S IMAGE AND ENVIRONMENT

The positive images of Kingman, as described in the current General Plan, can be threatened by new development and by the thoughtlessness of those already in the area. There are a number of mitigation measures available to the City that, when enforced, can help maintain a positive image of the area as well as enhance the environment. The City's Public Nuisance and Property Maintenance Ordinance and recent Anti-Noise Ordinance are designed to mitigate nuisances such as poorly kept property and loud sounds that can interfere with the tranquility and enjoyment of one's own property. The Outdoor Lighting Code is designed to maintain dark night skies in Kingman through the use of light shielding and banning of certain lighting methods. Light pollution is the bane of both professional and amateur astronomers and anyone else who enjoys viewing the stars at night. Finally, the City's Underground Utility Ordinance is designed to require underground utility connections for new development in order to reduce or at least not allow new unsightly poles and overhead wires that can obstruct and degrade the natural mountain views of the area.

APPENDIX

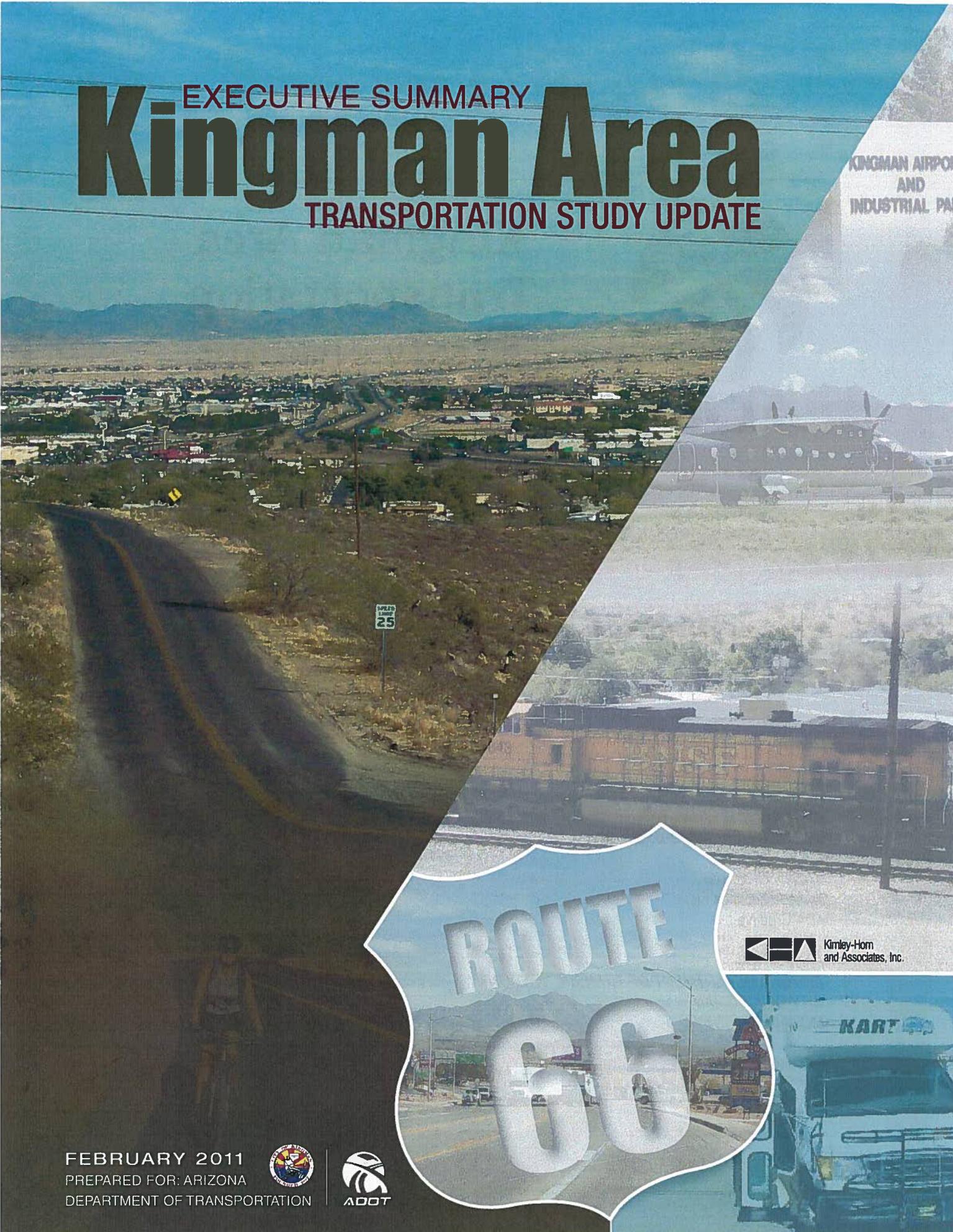
KINGMAN AREA TRANSPORTATION STUDY EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Kingman Area

TRANSPORTATION STUDY UPDATE

KINGMAN AIRPORT
AND
INDUSTRIAL PARK



◀▶ Kimley-Horn
and Associates, Inc.

FEBRUARY 2011
PREPARED FOR: ARIZONA
DEPARTMENT OF TRANSPORTATION



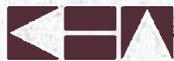


Kingman Area Transportation Study Update

ADOT MPD Task Assignment 14-10
PGTD 0448
Contract # T08-49-U0001

EXECUTIVE SUMMARY

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ARIZONA DEPARTMENT OF TRANSPORTATION
CITY OF KINGMAN
MOHAVE COUNTY

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1 INTRODUCTION

The Arizona Department of Transportation (ADOT), in cooperation with the City of Kingman and Mohave County, initiated a study to update the 2005 Kingman Area Transportation Study (KATS) utilizing the Planning Assistance for Rural Areas (PARA) program. The purpose of the PARA program is to assist counties, cities, towns, and tribal communities in addressing a broad range of multimodal transportation planning issues.

The principal purpose of this study is to update the 2005 KATS. The study will result in a plan of transportation improvements for 5-year (short-range), 10-year (mid-range), and 20-year (long-range) planning horizons. The recommendations are multimodal, considering roadways, non-motorized transportation modes (bicycles and pedestrians), and transit components.

This document, the *Kingman Area Transportation Study Update Executive Summary*, is a companion to the *Kingman Area Transportation Study Update Final Report*. It provides a brief summary of current and future conditions, transportation needs and issues, recommended improvements, and the implementation plan. More detailed information on each topic can be found in the *Final Report*.

The study area encompasses the entire City of Kingman (City) plus portions of unincorporated Mohave County (County), as shown in **Figure 1**. This study area is significantly larger than what was included in the 2005 KATS, having been expanded from 59 square miles to 165 square miles.

2 CURRENT CONDITIONS

This chapter summarizes data obtained on current conditions to help identify current needs and deficiencies of the existing transportation network.

2.1 Land Uses

An understanding of current land uses is important for modeling travel characteristics. Land use information is converted to population and employment data for use in the travel demand model. Typically, population produces trips while employment attracts trips in the travel demand model.

The study area is currently comprised of various land uses, including commercial, industrial, residential, and public land uses. Major traffic generators in the study area include the Kingman Airport and Industrial Park, Kingman Regional Medical Center, Hualapai Mountain Medical Center, government services and commercial businesses in the downtown area, and the shopping areas along Stockton Hill Road north of Detroit Avenue.

Public lands are also present within the study area. Public land uses/ownership within the study area include: City, County, State, and Federal government facilities, the Cerbat Foothills Recreation Area (owned by the Bureau of Land Management and the City), State Trust land (owned by the Arizona State Land Department, or ASLD), parks, open space, and schools.

The 2010 population estimates for the 2005 KATS study area were obtained from the Arizona Department of Commerce. The population within the expanded portion of the study area was developed by estimating the number of housing units factored by the average household size for the City of Kingman from the 2000 census. The resulting study area population estimate for 2010 is 52,049. A comparison of 2000 population estimates and 2010 population estimates is provided in **Table 1**.

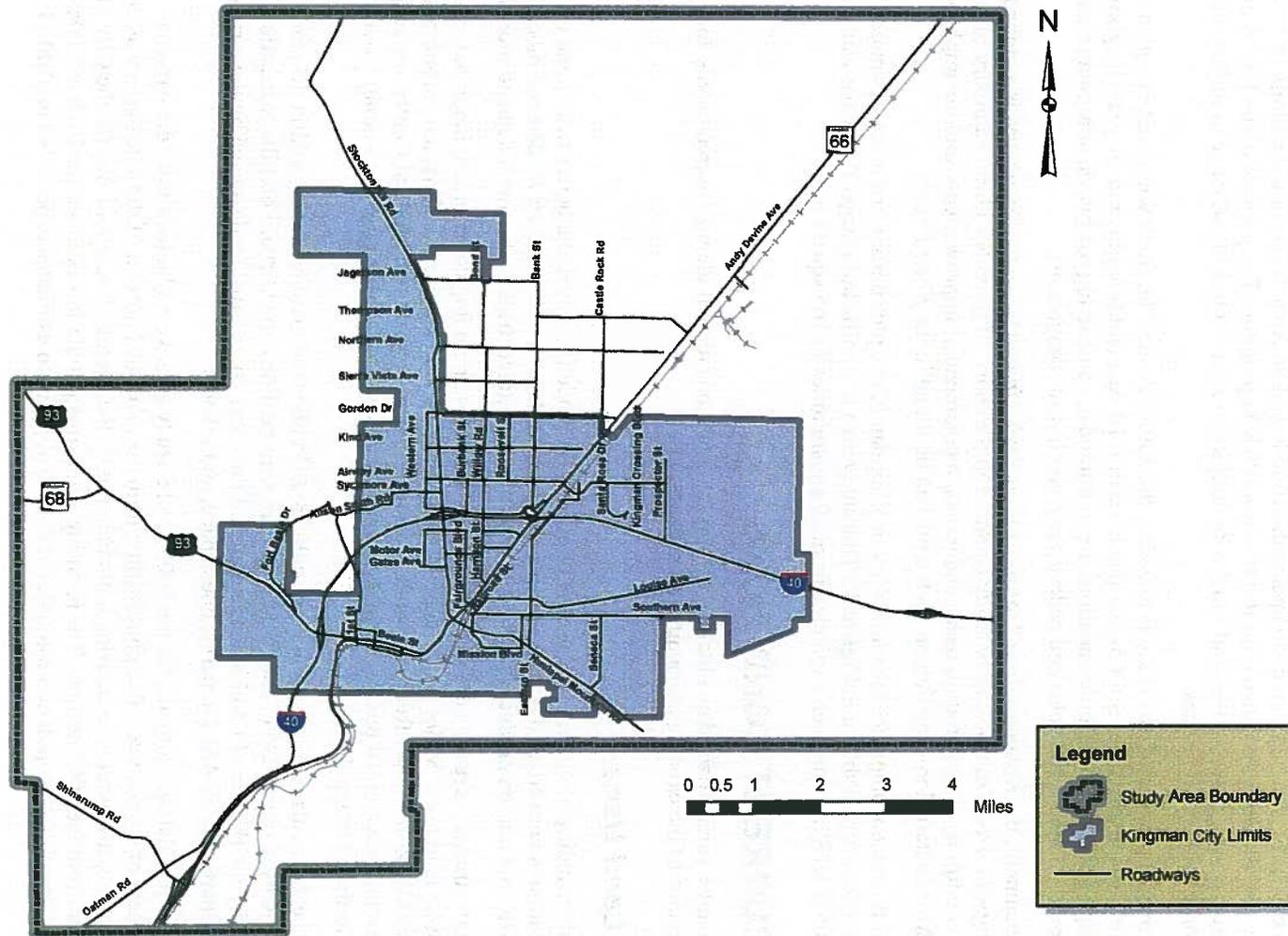


Figure 1: Study Area

Table 1. 2000 and 2010 Study Area Population

Portion of Study Area	2000 Population	2010 Population	2000-2010 Annual Growth Rate
Population within the City limits	20,069	31,722	4.68%
Population within the adjacent unincorporated land	14,810	17,875	1.90%
Population within the expanded portion of the study area	N/A	2,452	N/A
Total	34,879	52,049	

Sources: 2000 Census, Arizona Department of Commerce

The employment types in the Kingman area include government, medical, manufacturing, and retail. Employment data for 2010 was estimated using a ratio of employment to population of 0.38. This is the same ratio that was used in the 2005 KATS. The resulting 2010 employment estimate for the study area is 19,779.

2.2 Roadways

The existing roadway network in the study area is composed of an interstate highway, a U.S. highway, two state highways, an arterial street system, and collector and local streets. This study focuses on all of these categories with the exception of local streets.

2.2.1 Traffic Volumes

Traffic count data was obtained to document the volume of traffic on study area roadways. Daily traffic volume data from 2008, 2009, and 2010 on selected roadway segments was provided by the City, County, and ADOT and is displayed in **Figure 2**. Peak period intersection movement volumes were collected at 17 locations.

2.2.2 Traffic Levels of Service

Roadway traffic operations are defined and categorized by the amount of delay experienced by an average driver. The operations are categorized by a grading system called level of service (LOS), which has a letter designation ranging from A (no delay) to F (severe congestion). These levels are visually depicted in **Figure 3**.

LOS is generally defined as follows:

- LOS A represents free flow.
- LOS B represents reasonably free flow, but the presence of other users in the traffic stream begins to be noticeable.
- LOS C represents stable flow. The operation of individual users is somewhat affected by interactions with others in the traffic stream.
- LOS D represents high-density but stable flow. The operation of individual users is significantly affected by interactions with others in the traffic stream.
- LOS E represents unstable flow, meaning operating conditions are at or near the capacity level. The operation of individual users is heavily affected by interactions with others in the traffic stream.
- LOS F represents forced or breakdown flow, meaning operating conditions have exceeded the capacity level. The operation of individual users is severely affected by interactions with others in the traffic stream.

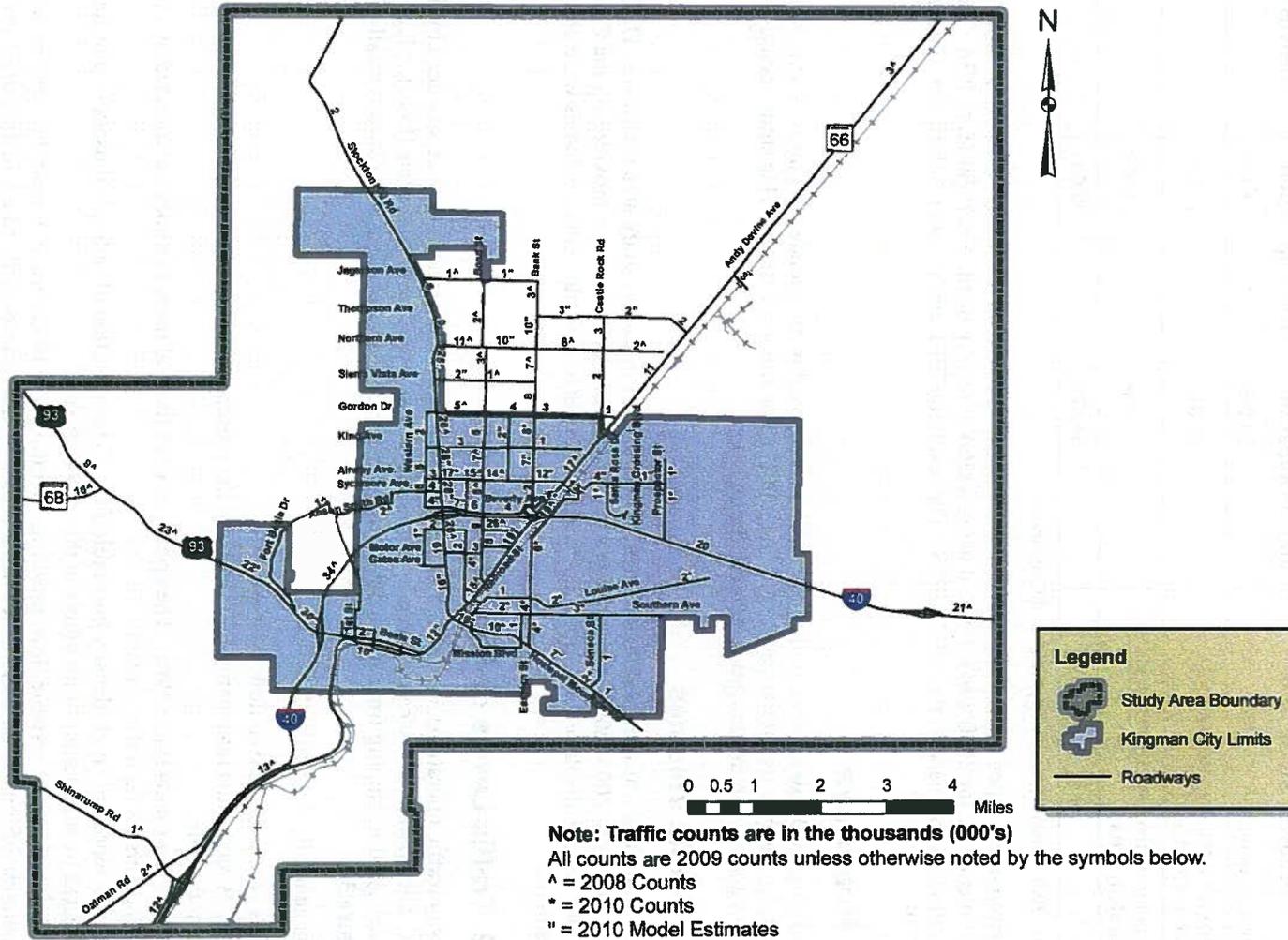
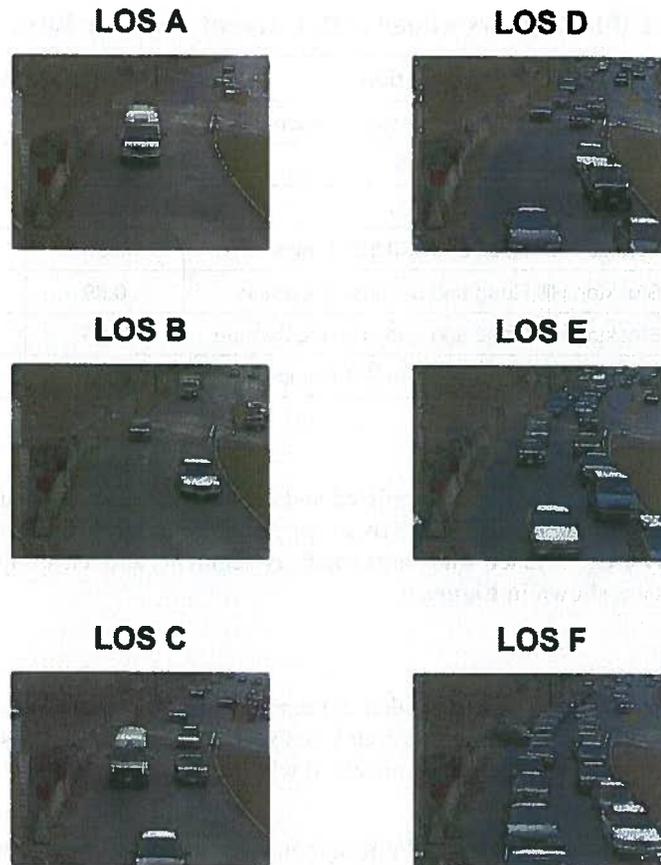


Figure 2: Current Daily Traffic Volume Counts



Source: Florida DOT Quality/Level of Service Handbook, 2002

Figure 3: Depictions of Traffic Levels of Service

For the Kingman area, roadways and intersections operating at LOS A, LOS B, and LOS C are considered to be acceptable and do not require capacity improvements.

A review of the current daily volumes compared to daily volume LOS thresholds indicates that no study area roadway segments currently exceed the daily volume threshold for LOS D. The only roadway segments that currently exceed the daily volume threshold for LOS C are Stockton Hill Road between Northern Avenue and Motor Avenue, and US 93 between Fort Beale Drive and I-40.

Table 2 shows the study area intersections that currently have a critical v/c ratio corresponding to LOS D or worse based on the results of the peak hour capacity analysis. Four intersections along Stockton Hill Road, plus both ramp intersections at the I-40/US 93 interchange, have a v/c ratio corresponding to LOS E during the midday peak hour. Additional capacity is likely needed at these intersections. The Stockton Hill Road and I-40 WB Ramps intersection has a v/c ratio that corresponds to LOS D during the midday peak hour and more detailed analysis should be conducted to determine if additional capacity is needed.

Table 2. Intersections with Current Need for Improvements

Intersection	V/C Ratio	LOS Value
Stockton Hill Road and Airway Avenue	0.96	E
I-40 EB Ramps and US 93	0.92	E
I-40 WB Ramps and US 93	0.90	E
Stockton Hill Road and I-40 EB Ramps	0.90	E
Stockton Hill Road and Sycamore Avenue	0.89	E
Stockton Hill Road and Andy Devine Avenue	0.86	E
Stockton Hill Road and I-40 WB Ramps	0.83	D

2.2.3 Crash Analysis

A review of recent crash history was completed and the roadway segments and intersections with the highest crash rates were identified. In the five-year period from 2004 to 2008, there were a total of 4,218 crashes in the study area. The ten study area roadway segments and ten study area intersections with the highest crash rates are shown in **Figure 4**.

2.2.4 Transit

Public transit services are currently provided in the Kingman area through the Kingman Area Regional Transit (KART) system. KART operates four fixed routes on an hourly basis. With advance reservations, curb-to-curb service is also provided within ¼-mile of the fixed routes to the general public, seniors, and disabled persons.

Specialized transit providers operate in the Kingman and Mohave County area. These include the Mohave Mental Health Center, which provides transportation services to support client needs, and WestCare, which contracts with child protective services to provide services to and from appointments, visits, school, and work within Mohave County.

2.2.5 Rail

The railroad tracks that extend through the City of Kingman provide for both freight and passenger services. According to the Federal Railroad Administration (FRA) Office of Safety Analysis, up to 81 trains pass through Kingman each day. The Burlington Northern Santa Fe Railway Company (BNSF) provides freight services and Amtrak provides passenger services in Kingman. Both service providers use the BNSF tracks, which run from Los Angeles to Chicago as part of the BNSF Transcon transcontinental main line. The train station in downtown Kingman provides a stop for Amtrak's "Southwest Chief" route, which has one train in each direction daily. In fiscal year 2010, the annual ridership at the Kingman Amtrak station was 10,160 persons according to Amtrak. There are six grade-separated roadway crossings and three at-grade roadway crossings of the mainline railroad tracks in the study area.

2.2.6 Bicycles and Pedestrians

Bicycle and pedestrian facilities are an integral part of a multimodal transportation network in that they provide options for travel (which is especially critical for travelers who cannot drive). Elements that make up the bicycle network include designated bike routes, striped bike lanes, paved shoulders along roadways, wide curb lanes, multi-use paths, and sidewalks. Pedestrian networks are comprised of sidewalks, trails, and multi-use paths.

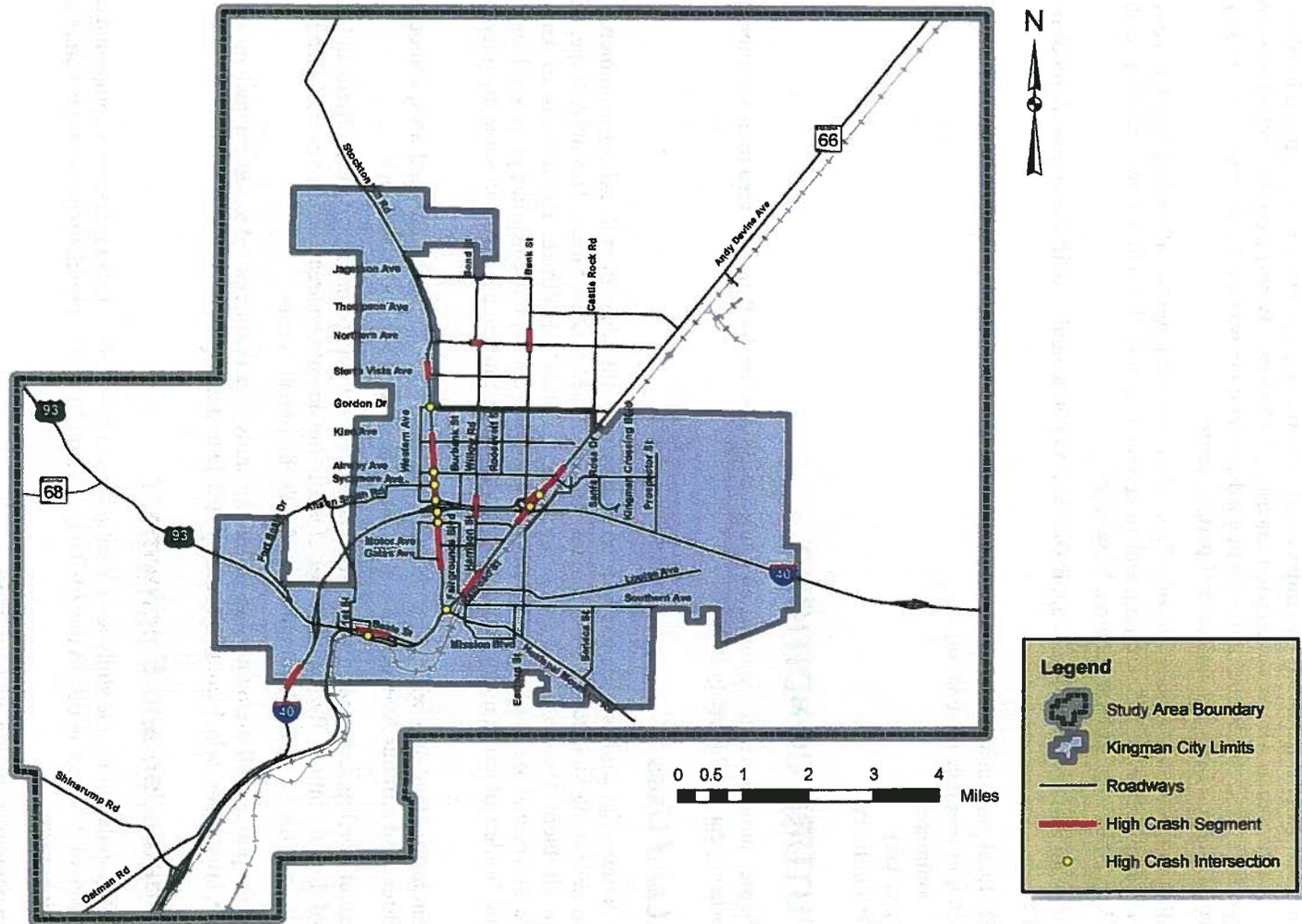


Figure 4: Roadway Segments and Intersections with Highest Crash Rates

2.2.7 Kingman Airport

The Kingman Airport is located five miles north of I-40 along SR 66 adjacent to the main BNSF railroad tracks. The Kingman Airport encompasses nearly 3,000 acres. Airport facilities include two intersecting runways (6,831 and 6,725 feet long), two helipads, several taxiways, a 2,640 square foot passenger terminal, 21 hangar facilities, and several parking aprons.

According to the 2006 *Kingman Airport Master Plan*, the total number of aircraft based at the Kingman Airport is approximately 305. Commercial air service is provided by Great Lakes Airlines, with service to Las Vegas, Nevada and Farmington, New Mexico.

The Kingman Airport currently has approximately 55,000 annual aircraft operations. Aircraft operations consist of:

- 60% local general aviation
- 37% transient general aviation
- 2% commercial
- 1% air taxi
- < 1% military

3 FUTURE CONDITIONS

This chapter summarizes the anticipated future conditions for the Kingman area transportation network. The horizon year for this study is 2030.

3.1 Land Uses

Future commercial land uses are expected to be located in the same areas as existing commercial land uses, namely along Stockton Hill Road, Andy Devine Avenue, Bank Street, Armour Avenue, Airway Avenue, Northern Avenue, and in the downtown area along Beale Street. The area east of Andy Devine Avenue is expected to see significant increases in commercial land use near the proposed Kingman Crossing Boulevard and Rancho Santa Fe Parkway traffic interchanges on I-40 when the interchanges are built.

Future industrial land uses will follow the same pattern as existing industrial land uses, and occur along Bank Street and Armour Avenue and at the Kingman Airport and Industrial Park.

Residential developments are anticipated to replace vacant land primarily on the northern and eastern edges of the City limits. Residential areas closer to the downtown area are anticipated to see increased densities over time as infill development and redevelopment occurs.

Most of the public land use/ownership within the study area is anticipated to remain unchanged, except the State Trust lands, which could be sold by ASLD to developers.

3.2 Population and Employment

The 2030 population for the study area is estimated to be 77,363. This represents a compound annual growth rate of 2.0% compared to the 2010 population. The 2030 population estimate is comprised of three components:

- The population within the City limits
- The population within the adjacent unincorporated land
- The population within the expanded portion of the study area

Table 3 compares the 2010 and 2030 population estimates for the three components of the study area population.

Table 3. 2010 and 2030 Study Area Population

Portion of Study Area	2010 Population	2030 Population	2010-2030 Annual Growth Rate
Population within the City limits	31,722	50,872	2.39%
Population within the adjacent unincorporated land	17,875	22,911	1.25%
Population within the expanded portion of the study area	2,452	3,580	1.91%
Total	34,879	77,363	2.00%

Sources: 2000 Census, Arizona Department of Commerce

Employment data for 2030 was estimated using the same 0.38 ratio of employment to population that was used to estimate 2010 employment, resulting in an estimated 2030 study area employment total of 29,397.

3.3 Traffic Volume Forecasts

A travel demand model was developed for the Kingman area to provide a tool for estimating future traffic volumes. The model utilizes population and employment data, typical vehicle trip generation characteristics, and roadway network information such as number of through lanes and speed limits to estimate traffic volumes on the roadway network. The model estimates traffic volumes by determining the number of vehicle trips produced and attracted by the various land uses and assigning those trips to the adjacent roadway network.

A 2010 baseline year model was developed using the 2010 population and employment data. The 2010 volumes generated by the model were compared to the available historical traffic count data and model parameters were adjusted until the 2010 model volumes were similar to the historical counts. After the 2010 conditions model was calibrated, a 2030 horizon year baseline model was developed using the 2030 population and employment data. The 2030 volumes generated by the model were reviewed for reasonableness and minor adjustments were made as needed. **Figure 5** shows the projected baseline 2030 study area traffic volumes.

3.4 Roadway Levels of Service

Future roadway needs were identified by comparing the projected baseline 2030 daily traffic volumes to daily volume LOS thresholds to determine which roadways are approaching their maximum capacity. Roadway segments with existing daily volumes below the maximum daily volume threshold for LOS C likely do not need additional through capacity, while roadway segments with existing daily volumes above the maximum daily volume threshold for LOS D will probably need additional through capacity. For roadway segments with existing daily volumes between the maximum daily volume thresholds for LOS C and LOS D, more detailed analysis should be conducted to evaluate intersection geometry, signal timing, and number and spacing of driveways to determine if additional through capacity is needed.

3.5 Public Transit

Future public transit services in the study area are anticipated to be provided by KART. There are no “committed” expansion projects for additional KART routes or new public transit facilities such as bus

bays and commuter park-and-ride lots. In fact, if the recent decline in available public transit funding continues, KART has plans to further reduce service hours.

3.6 Rail

Railroad traffic is anticipated to increase in the future as population and employment increase in the United States. The City has plans to provide several additional grade-separated roadway crossings of the railroad tracks but funding has not been secured for any of these crossings.

The City has had preliminary discussions about establishing railroad “quiet zones” in accordance with FRA requirements at the three downtown Kingman at-grade crossings. When a quiet zone is established, trains are not permitted to blow their horns within the quiet zone except in emergencies.

There has been discussion and planning at the national level regarding high-speed passenger rail. High-speed rail travel is generally economically competitive with highway and air travel between cities that are 100 to 600 miles apart. According to the *2010 Arizona Statewide Rail Framework Study*, there is great potential to connect the cities of Phoenix and Las Vegas with a high-speed rail corridor, and the likely route would pass through the Kingman area.

3.6.1 Bicycles and Pedestrians

At the national level, there is emphasis on complying with the Americans with Disabilities Act (ADA) and providing more bicycle and pedestrian facilities along roadways to create “complete streets”. “Complete streets” are designed to function for all users to safely and effectively move along and across a “complete street” (see www.completestreets.org).

Elements of a complete street include sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible transit stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area may have different elements, but should achieve the same goal.

3.6.2 Kingman Airport

The *2006 Kingman Airport Master Plan* recommends constructing a new terminal building, several new taxiways, and an extension of Runway 3-21. The master plan also recommends reserving the lands south and east of the airport along the edge of airport property for potential industrial uses.

4 IDENTIFIED CURRENT AND FUTURE NEEDS

The identified transportation system needs result from a variety of factors, including roadway congestion, high crash areas, physical barriers such as I-40 and the railroad, traffic control devices, land development and growth projections, gaps in bicycle and pedestrian facilities, and inadequate transit service. As a first step in determining alternatives and solutions, issue areas and deficiencies were documented.

4.1 Existing and Future Capacity Deficiencies

Capacity deficiencies were evaluated for intersections and roadway segments using a LOS C threshold based on existing traffic count data and 2030 traffic forecasts. The roadway segments with future LOS D or worse are shown in **Figure 6**. In addition to the intersections noted previously in Table 2 with existing LOS D or LOS E, the major intersections within the identified capacity-deficient roadway segments may need additional capacity improvements to provide acceptable intersection traffic operations through 2030. Future traffic signals may also be warranted at some of the intersections within the identified capacity-deficient roadway segments.

4.2 Safety

The ten high-crash rate study area roadway segments intersections identified previously in Figure 4 need to be evaluated to determine if crash patterns can be identified that are susceptible to correction by potential safety countermeasures.

4.3 Access

The railroad and I-40 are transportation corridors that have created physical barriers for other transportation facilities and restrict access – including emergency access – to various parts of the region. There are a limited number of crossings of these facilities, and in the case of the railroad, some of the crossings are at-grade crossings. As a result, the choice of travel routes is limited.

4.4 Public Comments/TAC Input

Comments were solicited from the public during the formal public meetings and from the TAC following the analysis of existing and future conditions. The highlights of the comments are summarized below.

- Need safe bicycle facilities along existing roadways
- Improve local transit system
- Relieve congestion on north-south corridors
- Identify right-of-way needs early
- Improve business access points on Stockton Hill Road
- Relieve congestion on Stockton Hill Road and West Beale (truck stop area)
- Provide right-turn lane from West Beale to EB I-40
- There is a lack of facilities and a need for alternative modes
- Need access management
- Develop strategies to reduce auto trips
- Get the residents to pass a City property tax
- Securing funding for improvements is critical
- Support land use policies that de-emphasize auto use – emphasize system management
- Consider roundabouts instead of signals
- Need additional interchanges and railroad crossings

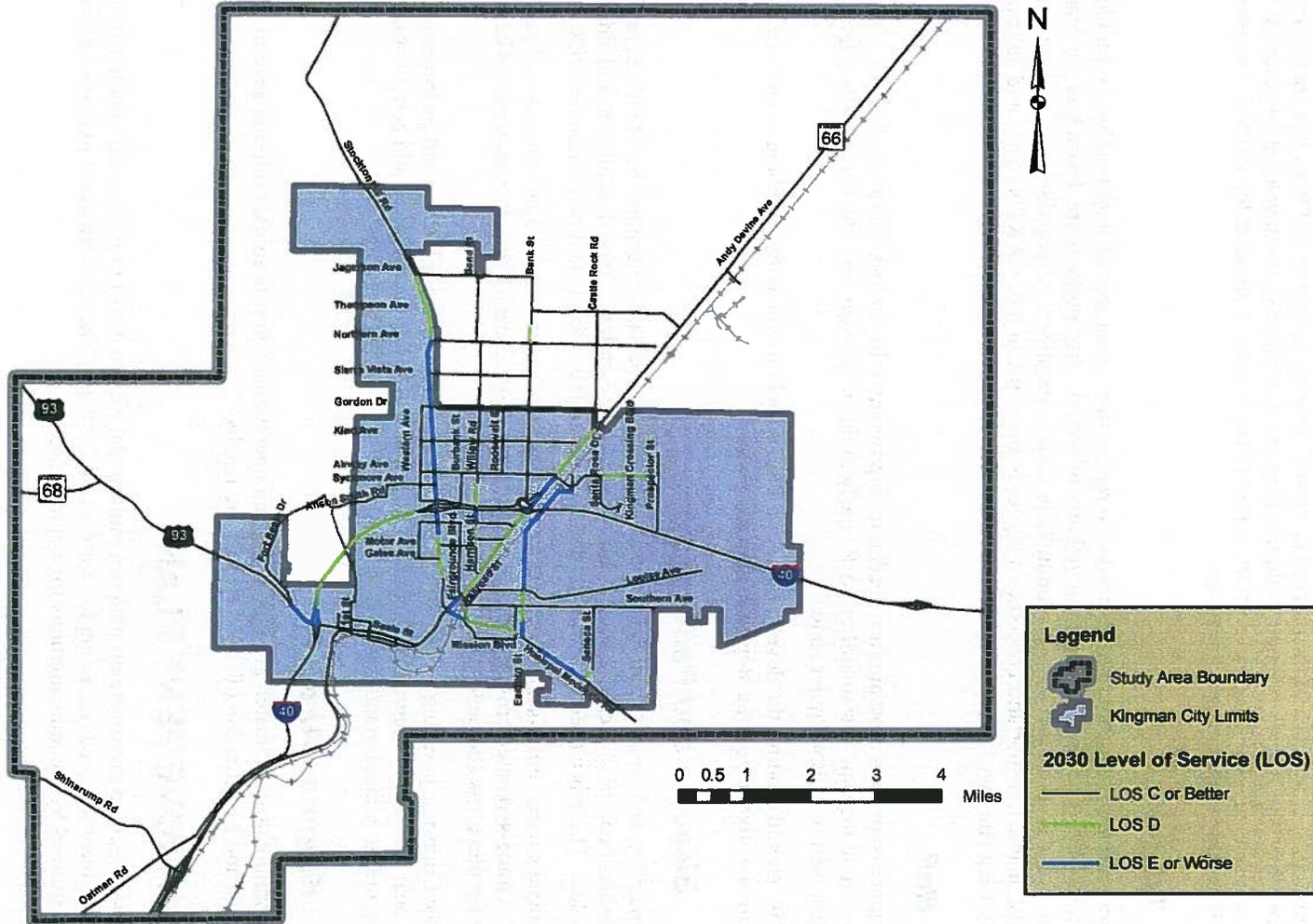


Figure 6: Baseline 2030 Roadway Segments with LOS D or LOS E

4.5 Accessibility and Land Development

Good access and availability of services can provide a direct economic benefit. Currently, the majority of land north of I-40 and east of the railroad is vacant. Existing access to and from this area is limited to Eastern Street and Airway Avenue. Additional access will increase the development potential of this area. Additionally, the Kingman Airport Authority has indicated the need for additional airport access in order to be able to attract new businesses.

4.6 Transit

New and stable funding sources are needed to replace the recent loss of state funding for public transit operations and to ensure the long-term viability of KART. Bus pullouts are desired, as are “complete streets” cross-sections that better accommodate transit operations. As population and employment grow and sustainable transportation becomes a bigger issue, expansion of KART’s routes and an increase in service frequency will likely be needed.

4.7 Rail

More grade-separated crossings are needed to improve mobility across the railroad tracks. To better promote livability and sustainability, particularly in the downtown area, the City should pursue the establishment of railroad quiet zones.

The City should monitor the development of a high-speed rail line between Phoenix and Las Vegas and promote the advantages of a stop in Kingman.

4.8 Bicycles and Pedestrians

As population and employment grow and sustainable transportation becomes the standard, additional bicycle and pedestrian facilities such as bike lanes, wide curb lanes, paved shoulders, and sidewalks will be needed. There is a need for a clearly-defined, continuous bicycle and pedestrian network.

“Complete streets” cross-sections should be developed to better accommodate bicycle and pedestrian travel. Grade-separated crossings of major roadways may be needed at select locations to better promote safety for bicyclists and pedestrians.

Mohave County is pursuing a Safe Routes to School grant to improve bicycle and pedestrian facilities and travel near Manzanita Elementary School. Other school sites in the region would benefit from similar Safe Routes to School grants.

4.9 Kingman Airport

To accommodate anticipated growth in aviation operations, a new terminal building, several new taxiways, and an extension of Runway 3-21 are needed.

5 IMPROVEMENT PLAN

The recommended improvement plan is a multimodal plan that will provide a regional transportation system to meet the needs of the region for the next 20 years. The recommended plan is summarized by mode followed by recommendations for implementation.

5.1 Roadways

The following recommended roadway improvements are grouped in categories by type of improvement. Whenever possible, these roadway improvement projects should incorporate “complete streets” concepts that accommodate multimodal travel and not just automobiles.

A 2030 travel forecasting model run that incorporates the recommended roadway improvement projects was prepared. Only one roadway segment – Stockton Hill Road from I-40 to Airway Avenue – is expected to operate at LOS D when all the roadway improvements are constructed. All other roadways are expected to operate at LOS C or better with the recommended improvements.

5.1.1 Intersection Improvements

- Stockton Hill Road and Airway Avenue
- Stockton Hill Road and Gordon Drive
- Stockton Hill Road/Hualapai Mountain Road and Andy Devine Avenue
- Bank Street and Northern Avenue
- SR 66/Andy Devine Avenue and Armour Avenue
- Andy Devine Avenue and 4th Street

5.1.2 Traffic Signals

Intersections currently controlled by traffic signals should be monitored to ensure that traffic signal timing and phasing is appropriate for traffic conditions at the intersections and revised as needed.

Unsignalized intersections that experience congestion, high crash rates, or major changes in traffic patterns should be studied to determine if traffic signalization may be warranted.

5.1.3 New/Improved Two-Lane Roadways

- Glen Road: Airway Avenue to Gordon Drive (in current City Capital Improvement Program (CIP))
- Central Street: Hualapai Mountain Road to Airfield Avenue
- Seneca Street: Hualapai Mountain Road to Southern Avenue
- Cherokee Street: Cheyenne Avenue to Airfield Avenue
- Cheyenne Avenue: Seneca Street to Cherokee Street
- Dakota Avenue: Central Street to Cherokee Street
- Airfield Avenue: Eastern Avenue to Cherokee Street
- Castle Rock Road: Thompson Avenue to Grace Neal Parkway
- Prospector Street: Thompson Avenue to Grace Neal Parkway
- Western Avenue: Beverly Avenue to Gordon Drive
- Anson Smith Road/White Cliffs Road: Stockton Hill Road to 1st Street
- Fort Beale Drive: Anson Smith Road to US 93
- Southern Avenue: Eastern Street to Rancho Santa Fe Parkway (in current City CIP)
- Rancho Santa Fe Parkway: Hualapai Mountain Road to Louise Avenue (in current City CIP)
- Rancho Santa Fe Parkway: Airway Avenue to Industrial Boulevard (in current City CIP)
- Airway Avenue: Prospector Street to Rancho Santa Fe Parkway
- Industrial Boulevard: Rancho Santa Fe Parkway to Mohave Airport Drive
- Slaughter House Canyon Road: Mission Boulevard to Topeka Street (in current City CIP)

5.1.4 Widen to or New Four Lanes

- Airway Avenue: Western Avenue to Stockton Hill Road
- Rancho Santa Fe Parkway: Louise Avenue to Airway Avenue
- Hualapai Mountain Road: Fripps Ranch Road to Seneca Street
- Gordon Drive: Stockton Hill Road to Bank Street
- Stockton Hill Road: Northern Avenue to Grace Neal Parkway
- Airway Avenue: Sage Street to Kingman Crossing Boulevard
- Harrison Street/Willow Road: Andy Devine Avenue to Airway Avenue
- Eastern Street: Airway Avenue to Hualapai Mountain Road
- Kingman Crossing Boulevard: I-40 to Airway Avenue
- Kingman Crossing Boulevard: I-40 to Airfield Avenue
- Kingman Crossing Boulevard: Airfield Avenue to Southern Avenue
- Beverly Avenue: Stockton Hill Road to Bank Street
- Airway Avenue: Kingman Crossing Boulevard to Rancho Santa Fe Parkway
- Grace Neal Parkway: Stockton Hill Road to SR 66
- Santa Rosa Drive: Kingman Crossing Boulevard to Rancho Santa Fe Parkway

5.1.5 Add Median to Four-Lane Roadway

- Stockton Hill Road: Airway Avenue to Gordon Drive
- Andy Devine Avenue/SR 66: Detroit Avenue to Airway Avenue

5.1.6 Widen to Six Lanes

- Stockton Hill Road: Detroit Avenue to Airway Avenue
- Stockton Hill Road: Airway Avenue to Northern Avenue
- Stockton Hill Road: Andy Devine Avenue to Detroit Avenue
- Andy Devine Avenue/SR 66: I-40 to Gordon Drive
- I-40: US 93 to Stockton Hill Road
- Hualapai Mountain Road: Andy Devine Avenue to Eastern Street

5.1.7 New Connection across I-40

- Fairgrounds Boulevard/Burbank Street

5.1.8 Railroad Crossings/Improvements

- Topeka Street (eastbound tracks)
- Airfield Avenue
- Railroad Quiet Zone

5.1.9 Freeway Interchange Improvements

- I-40/US 93/Beale Street
- I-40 and Stockton Hill Road

5.1.10 New Freeway Interchanges

- I-40 and Rancho Santa Fe Parkway
- I-40 and Kingman Crossing Boulevard

5.2 Transit

The focus of the transit recommendations is to improve the experience of riders and manage system growth in a way that attracts new ridership. Recommended transit improvements include increased frequency, enhanced accessibility, rider comfort and protection, and new routes. Improvements can be incremental, then evaluated and adjusted according to their level of success. The following improvements are recommended for the transit system.

5.2.1 30-Minute Headways

- Improve the frequency on all existing KART routes to 30-minute headways between buses during the peak periods

5.2.2 New KART Routes

- Seneca Street/Kingman Crossing Boulevard: Hualapai Mountain Road to Airway Avenue
- Gordon Drive: Stockton Hill Road to Castle Rock Road
- Kino Avenue: Stockton Hill Road to Bank Street
- Northern Avenue: Stockton Hill Road to Castle Rock Road
- Southern Avenue: Railroad Street to Cherokee Street
- Airport employment area

5.2.3 Bus Pull-Outs and Shelters

- Provide bus pull-outs and shelters on all routes

5.2.4 New Transit Transfer Center

- Identify location for a new transit transfer center

5.2.5 Passenger Rail

- Be an active participant in the discussion for continued Amtrak service and for a high-speed rail line between Phoenix and Las Vegas that includes a stop in Kingman

5.3 Non-Motorized

While most people use vehicles and/or transit for travel, almost every trip has a walking component. It is also important to recognize that some portions of the population rely on non-motorized means because they cannot or choose not to use vehicles. Most new urban street design and construction projects include facilities for bicycles and pedestrians. The following design elements should be considered to help create “complete streets”.

- Provide continuous sidewalks and bicycle lanes
- Provide comfortable pedestrian and bicycle access to shopping, schools, and other activity centers
- Provide pedestrian facilities that meet ADA requirements

Specific non-motorized improvement recommendations include the following.

5.3.1 Add Bicycle and Pedestrian Facilities

- Harrison Street/Willow Road: Andy Devine Avenue to Gordon Drive
- Airway Avenue: Stockton Hill Road to Andy Devine Avenue
- Gordon Drive: Stockton Hill Road to Andy Devine Avenue

- Beverly Avenue: Willow Road to Bank Street
- Bank Street: Beverly Avenue to Northern Avenue
- Hualapai Mountain Road: Andy Devine Avenue to Seneca Street
- Northern Avenue: Stockton Hill Road to Bank Street
- Willow Road: Gordon Drive to Northern Avenue

5.3.2 New Multi-Use Pathway

- Eastern Pathway: Hualapai Mountain Road to Airway Avenue (Hualapai Mountain Road to Louise Avenue is included in the current City CIP)

5.3.3 ADA Improvements

- New sidewalk ramps
- Provide unobstructed sidewalk
- Shorter street crossings using curb “bulb-outs”
- ADA-compliant signal equipment

5.3.4 Safe Routes to School

- Pursue Safe Routes to School funding for bicycle and pedestrian improvements near schools

5.3.5 Traffic Signals

- Provide countdown pedestrian signal heads in accordance with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD)

5.4 Safety

- Coordinate with the Western Arizona Council of Governments (WACOG) to identify possible federal funding sources to address the high-crash locations in the region.

5.5 Functional Classification Revisions

A review of the current functional classification of area roadways indicates that the proportion of collector roadways is higher than the FHWA recommendation. The following are recommended changes from urban collector classification to urban minor arterial classification. These changes must be reviewed with WACOG and submitted to ADOT.

- Airway Avenue: Western Avenue to Rancho Santa Fe Parkway
- Gordon Drive: Stockton Hill Road to SR 66/Andy Devine Avenue
- Northern Avenue: Stockton Hill Road to Castle Rock Road
- Harrison Street/Willow Road: Andy Devine Avenue to Airway Avenue
- Bank Street: Airway Avenue to Northern Avenue
- Hualapai Mountain Road: Andy Devine Avenue to Seneca Street

6 IMPLEMENTATION

An implementation plan was developed to prioritize the recommended improvement projects into short-range (2011-2015), mid-range (2016-2020), and long-range (2021-2030) timeframes. Specific improvements recommended in each implementation timeframe are listed in **Table 4** by mode. The cost estimate in 2011 dollars is \$26.6 million for the short-range timeframe, \$141.4 million for the mid-range timeframe, and \$221.5 million for the long-range timeframe, for a total plan cost of \$389.5 million.

The actual order of implementation will be based on a variety of factors, including funding availability, development activity, traffic patterns, and private participation. The need for improvements should be re-evaluated each year as part of the various implementing agencies' budget processes or as needed if conditions and travel patterns change significantly.

The overall transportation improvement plan, combining the short-range, mid-range, and long-range recommended improvements, is presented in **Figure 7**.

6.1 Revenue

Due to the recent economic conditions, the traditional transportation revenue sources have been reduced or temporarily eliminated. Highway User Revenue Fund (HURF) and general fund revenue have been reduced as a result of lower sales tax collection and reduced mileage. The State legislature has stopped distribution of the Local Transportation Assistance Fund (LTAF) to cities. Federal funding is still available, but Kingman typically must compete with other agencies to obtain it. Developer contributions (e.g., to dedicate roadway right-of-way and construct the half-street improvements) are expected to continue as new development occurs.

Because projected revenues are significantly less than the estimated costs of the recommended improvements, the City, the County, and ADOT will need to secure additional revenue sources if the recommended improvements are to be constructed within the recommended timeframes.

6.2 Title VI Impacts

The U.S. Department of Transportation regulations related to disadvantaged, or Title VI, populations (i.e., minority, low-income, elderly) state that in determining the site or location of transportation facilities, selection cannot be made with the purpose or effect of excluding persons from, denying them the benefits of, or subjecting them to discrimination under any program to which this regulation applies. According to the regulations, a project cannot be implemented that will cause disproportionately high and adverse impacts to disadvantaged populations.

The Kingman Area Transportation Study Update provides a long-range multi-modal plan to improve the overall transportation system of the region and benefit the region as a whole. Recommended improvement projects were not selected based on the population that would be impacted, but rather were selected to address an identified transportation need. More detailed analysis will be needed for individual projects that are federally-funded to ensure that there are no disproportionately high and adverse impacts to disadvantaged populations.

Table 4: Implementation Plan

Project Location	Improvement Description	Cost (thousand \$)		
		Short Range	Mid Range	Long Range
Short-Range Roadway Improvements				
Airfield Avenue	Design Concept Report for railroad grade separation	500		
Airway Avenue: Western Avenue to Stockton Hill Road	Widen to four lanes	1,000		
Andy Devine Avenue & 4 th Street	Safety improvements	250		
Andy Devine Avenue/SR 66: Detroit Avenue to Airway Avenue	Raised median	250		
Downtown at-grade railroad crossings	Quiet zone improvements and establishment	350		
Glen Road: Airway Avenue to Gordon Drive	New two-lane collector	2,000		
Gordon Drive: Stockton Hill Road to Bank Street	Widen to four lanes	6,000		
I-40/US 93 TI	Design Concept and Environmental Study for system TI	500		
SR 66/Andy Devine Avenue & Armour Avenue	Safety improvements	250		
Stockton Hill Road: Andy Devine Avenue to Northern Avenue	Design Concept Report	500		
Stockton Hill Road & Airway Avenue	Intersection widening/safety improvements	2,500		
Stockton Hill Road & Gordon Drive	Intersection widening/safety improvements	2,500		
Stockton Hill Road/Hualapai Mountain Road & Andy Devine Avenue	Intersection widening/safety improvements	2,500		
Stockton Hill Road: Airway Avenue to Gordon Drive	Raised median	250		
Topeka Street	Design Concept Report for railroad grade separation	500		
Western Avenue: Beverly Avenue to Gordon Drive	Improved two-lane collector	3,000		
Short-Range Transit Improvements				
KART blue route	Provide 30-minute headways during peak periods	500*		
KART blue route	Add bus pull-outs and shelters	1,000		
Short-Range Non-Motorized Improvements				
Airway Avenue: Stockton Hill Road to Andy Devine Avenue	Add bike facilities	500		
Beverly Avenue: Harrison Street to Bank Street	Add bike and pedestrian facilities	250		
Downtown sidewalks	ADA-related improvements	1,000		
Eastern Pathway: Hualapai Mountain Road to Louise Avenue	Multi-use path	200		
Harrison Street/Willow Road: Andy Devine Avenue to Gordon Drive	Add bike and pedestrian facilities	625		
Safe routes to school	Various locations	150		
Subtotal Short-Range Improvements Cost*		\$26,575		

Project Location	Improvement Description	Cost (thousand \$)		
		Short Range	Mid Range	Long Range
Mid-Range Roadway Improvements				
Airfield Avenue: Seneca Street to Kingman Crossing Boulevard	New two-lane collector		1,000	
Airfield Avenue	Railroad grade separation		10,000	
Airway Avenue: Prospector Street to Rancho Santa Fe Parkway	New two-lane collector		2,000	
Airway Avenue: Sage Street to Kingman Crossing Boulevard	Widen to four lanes		2,000	
Central Street: Hualapai Mountain Road to Airfield Avenue	New/improved two-lane collector		4,000	
Fairgrounds Boulevard at I-40	Design Concept Report for grade separation		500	
Harrison Street/Willow Road: Andy Devine Avenue to Airway Avenue	Widen to four lanes		10,000	
Hualapai Mountain Road: Fripps Ranch Road to Seneca Street	Widen to four lanes		4,400	
Hualapai Mountain Road: Andy Devine Avenue to Eastern Street	Design Concept Report		250	
I-40: US 93 to Stockton Hill Road	Design Concept Report		500	
I-40/Stockton Hill Road TI improvements	Design Concept Report		500	
I-40/US 93 TI	Construct interim improvements		10,000	
I-40/Kingman Crossing Boulevard TI	Construct new interchange		25,000	
I-40/Rancho Santa Fe Parkway TI	Construct new interchange		25,000	
Industrial Boulevard: Rancho Santa Fe Parkway to Mohave Airport Drive	Improved two-lane collector		3,000	
Kingman Crossing Boulevard: I-40 to Airway Avenue	New four-lane arterial		3,000	
Kingman Crossing Boulevard: I-40 to Airfield Avenue	New four-lane arterial		800	
Rancho Santa Fe Parkway: Hualapai Mountain Road to Louise Avenue	New two-lane collector		5,000	
Rancho Santa Fe Parkway: Airway Avenue to Industrial Boulevard	New two-lane collector		5,000	
Rancho Santa Fe Parkway: Louise Avenue to Airway Avenue	New four-lane arterial		6,000	
Southern Avenue: Eastern Street to Rancho Santa Fe Parkway	New two-lane collector		6,000	
SR 66/Andy Devine Avenue: I-40 to Gordon Drive	Design Concept Report		500	
Stockton Hill Road: Detroit Avenue to Airway Avenue	Widen to six lanes		3,500	
Topeka Street	Railroad grade separation		10,000	

Project Location	Improvement Description	Cost (thousand \$)		
		Short Range	Mid Range	Long Range
Mid-Range Transit Improvements				
All KART routes	30-minute headway during peak periods		1,500*	
All KART routes	Add bus pull-outs and shelters		2,000	
Gordon Drive	New KART route		500*	
New/modified route	Provide service to airport		500*	
Mid-Range Non-Motorized Improvements				
Bank Street: Beverly Avenue to Northern Avenue	Add bike and pedestrian facilities		625	
Eastern Pathway: Louise Avenue to Airfield Avenue	Multi-use path		200	
Gordon Drive: Stockton Hill Road to Andy Devine Avenue	Add bike and pedestrian facilities		625	
Subtotal Mid-Range Improvements Cost*			\$141,400	
Long-Range Roadway Improvements				
Airfield Avenue: Eastern Street to Seneca Street	New/improved two-lane collector			3,000
Airfield Avenue: Kingman Crossing Boulevard to Cherokee Street	New two-lane collector			4,000
Airway Avenue: Kingman Crossing Boulevard to Rancho Santa Fe Parkway	Widen to four lanes			4,000
Andy Devine Avenue/SR 66: I-40 to Airway Avenue	Widen to six lanes			7,900
Anson Smith Road/White Cliffs Road: Stockton Hill Road to 1 st Street	Improved two-lane collector			8,000
Bank Street and Northern Avenue	Intersection improvement			1,500
Beverly Avenue: Stockton Hill Road to Bank Street	Widen to four lanes			7,000
Castle Rock Road: Thompson Avenue to Grace Neal Parkway	New two-lane collector			2,000
Cherokee Street: Cheyenne Avenue to Airfield Avenue	New two-lane collector			4,000
Cheyenne Avenue: Hualapai Mountain Road to Cherokee Street	Improved two-lane collector			2,000
Dakota Avenue: Central Street to Cherokee Street	New/improved two-lane collector			3,000
Eastern Street: Hualapai Mountain Road to Airway Avenue	Widen to four lanes			8,000
Fairgrounds Boulevard/Burbank Street	Grade separation at I-40 and extend to Kino Avenue			12,000
Fort Beale Drive: Anson Smith Road to US 93	Improved two-lane collector			3,000
Grace Neal Parkway: Stockton Hill Road to SR 66	New four-lane arterial			22,000
Hualapai Mountain Road: Andy Devine Avenue to Eastern Street	Widen to six lanes			8,400



Project Location	Improvement Description	Cost (thousand \$)		
		Short Range	Mid Range	Long Range
Long-Range Roadway Improvements				
I-40/Stockton Hill Road TI	Reconstruct TI/safety improvements			20,000
I-40: US 93 to Stockton Hill Road	Widen to six lanes			12,000
I-40/US 93 TI	Construct system interchange improvements			50,000
Kingman Crossing Boulevard: Airfield Avenue to Southern Avenue	New four-lane arterial			3,200
Prospector Street: Thompson Avenue to Grace Neal Parkway	New two-lane collector			2,000
Santa Rosa Drive: Kingman Crossing Boulevard to Rancho Santa Fe Parkway	New four-lane arterial			6,000
Seneca Street: Hualapai Mountain Road to Southern Avenue	Improved two-lane collector			2,500
SR 66/Andy Devine Avenue: Airway Avenue to Gordon Drive	Widen to six lanes			4,250
Stockton Hill Road: Northern Avenue to Jagerson Avenue	Widen to four lanes			6,000
Stockton Hill Road: Airway Avenue to Northern Avenue	Widen to six lanes			7,000
Stockton Hill Road: Andy Devine Avenue to Detroit Avenue	Widen to six lanes			4,400
Long-Range Transit Improvements				
All KART routes	Add bus pull-outs and shelters			2,000
Kino Avenue	New KART route			500*
Northern Avenue	New KART route			500*
Seneca Street/Kingman Crossing Boulevard	New KART route			500*
Southern Avenue	New KART route			500*
Transit transfer center	New facility			1,000
Long-Range Non-Motorized Improvements				
Eastern Pathway: Airfield Avenue to Airway Avenue	Multi-use path			200
Hualapai Mountain Road: Andy Devine Avenue to Seneca Street	Add bike and pedestrian facilities			500
Northern Avenue: Stockton Hill Road to Bank Street	Add bike and pedestrian facilities			375
Willow Road: Gordon Drive to Northern Avenue	Add bike and pedestrian facilities			250
Subtotal Long-Range Improvements Cost*				\$221,475
Total Plan Cost*				\$389,450

*annual operating cost, not included in the total plan cost

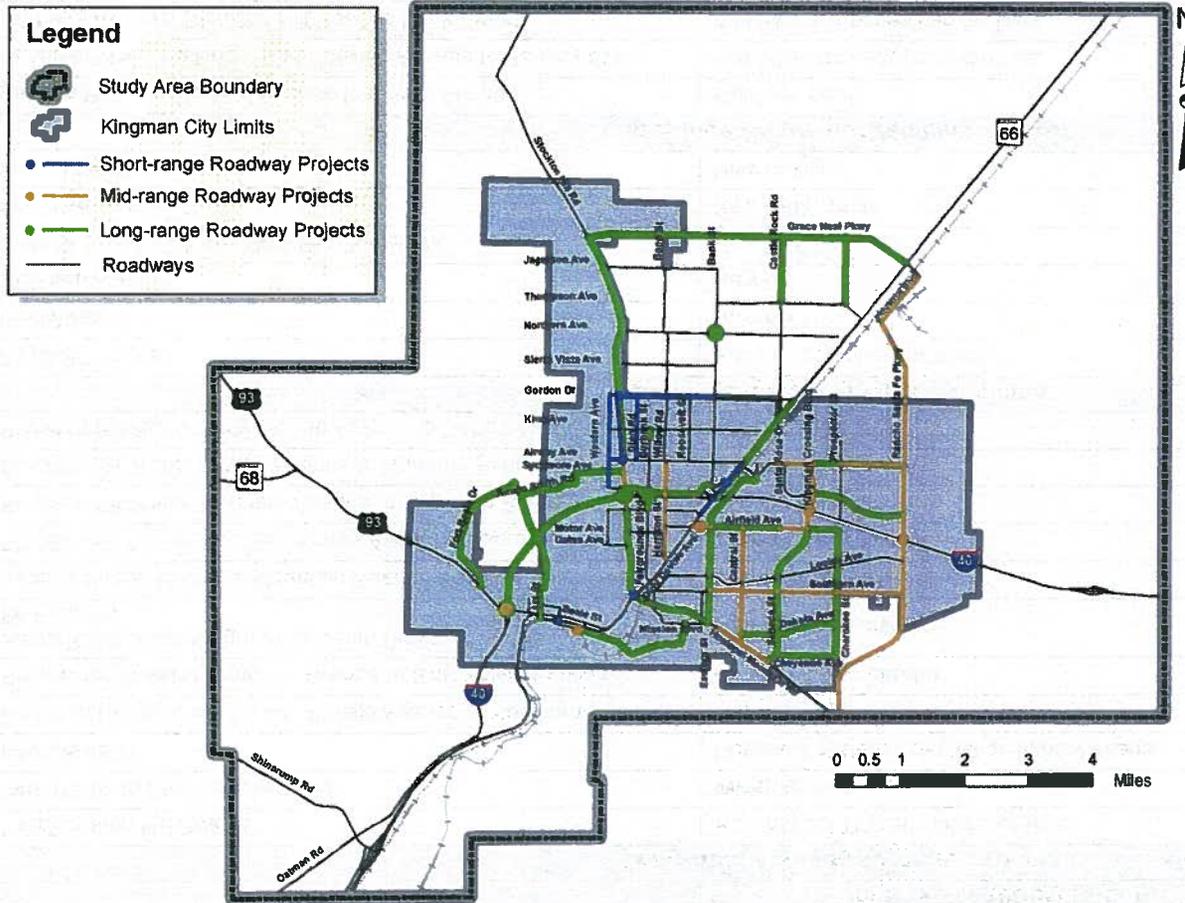


Figure 7: Improvement Plan

Additional Projects – Short Range

Studies

- Design Concept Report
- Airfield Avenue railroad grade separation
- Topoka Street railroad grade separation
- I-40/US 93 TI
- Stockton Hill Road: Andy Devine Avenue to Northern Avenue
- Quiet zone improvements at downtown railroad crossings

Transit

- Provide 30-minute frequency during peak periods
- KART blue route
- Add bus pull-outs and shelters
- KART blue route

Non-Motorized

- Add bike facilities
- Airway Avenue: Stockton Hill Road to Andy Devine Avenue
- Add bike and pedestrian facilities
- Beverly Avenue: Harrison Street to Bank Street
- Harrison Street/Willow Road: Andy Devine Avenue to Gordon Drive
- ADA-related improvements
- Downtown sidewalks
- Multi-use path
- Eastern Pathway: Hualapai Mountain Road to Louise Avenue
- Safe Routes to school
- Various locations

Additional Projects – Mid Range

Studies

- Design Concept Report
- Fairgrounds Boulevard grade separation at I-40
- Hualapai Mountain Road: Andy Devine Avenue to Eastern Street
- I-40: US 93 to Stockton Hill Road
- I-40/Stockton Hill Road TI Improvements
- SR 66/Andy Devine Avenue: I-40 to Gordon Drive

Transit

- Provide 30-minute frequency during peak periods
- All KART routes
- Add bus pull-outs and shelters
- All KART routes
- New KART route
- Gordon Drive
- Service to airport

Non-Motorized

- Add bike and pedestrian facilities
- Bank Street: Beverly Avenue to Northern Avenue
- Gordon Drive: Stockton Hill Road to Andy Devine Avenue
- Multi-use path
- Eastern Pathway: Louise Avenue to Airfield Avenue

Additional Projects – Long Range

Transit

- Add bus pull-outs and shelters
- All KART routes
- New KART route
- Kino Avenue
- Northern Avenue
- Seneca Street/Kingman Crossing Boulevard
- Southern Avenue
- New transit transfer center

Non-Motorized

- Add bike and pedestrian facilities
- Hualapai Mountain Road: Andy Devine Avenue to Seneca Street
- Northern Avenue: Stockton Hill Road to Bank Street
- Willow Road: Gordon Drive to Northern Avenue
- Multi-use path
- Eastern Pathway: Airfield Avenue to Airway Avenue