

# City of Bisbee Sustainability Plan 2016-2017

## Government and Economy (Policies and Strategies)

Protecting and enhancing the natural environment, social well-being, and local economy in order to create and cultivate a self-sufficient, healthy and vibrant community.



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# **1. HEALTH**

## **Mission**

Institute health related policies and resolutions which protect, support and enhance the physical and mental wellbeing of Bisbee residents and visitors.

The physical and mental wellbeing of Bisbee residents is crucial to maintaining a healthy population with the ability to thrive independently. Resources for wellbeing include wellness, community, and crisis services, green space, recreation opportunities and events, and physical exercise options. Health and wellbeing of Bisbee residents is key to having a vibrant and resilient community. Living in a community where the residents help support one another's wellbeing makes Bisbee a nurturing, healthful place to live and visit.

## **Policies**

- Ensure safe and reliable sources of drinking water. Ensure water is sustainably used so that future residents will have adequate supplies.
- Support increased water quality standards above minimum public utility levels.
- Minimize airborne toxic dust particles from mining activity, including support of Freeport McMoran's remediation efforts.
- Ensure that infrastructure is safe for pedestrians and vehicles.
- Identify and support physical and mental health and wellness practitioners in the community.
- Identify, support and disseminate information about existing and new crisis intervention, mental health, drug treatment, homeless, elderly and disabled services.
- Educate the community about and encourage the local growing of organic food to ensure a healthy, accessible food supply.
- Encourage physical exercise and minimize carbon footprint by building and promoting bike paths and walking trails.
- Create opportunities for younger residents and adults alike to spend time outdoors utilizing the local natural environment, municipal pool and parks.
- Promote siting of all new commercial development within walking and/or biking distance of existing residential districts.
- Promote siting of all new residential development within walking and/or biking distance from existing commercial areas.

- Install automatic sensors on water faucets and in public restrooms to save water and reduce the spread of infectious disease.
- Promote and support neighborhood parks, recreation centers and recreation areas as healthful areas to exercise and spend time.
- Create opportunities for all Bisbee residents and visitors to learn about their local natural and built environments.
- Provide safe and sanitary environments for work, transportation and recreation to all Bisbee residents and visitors.
- Encourage and provide opportunities for residents to communicate more effectively and compassionately with each other and with city officials/police and for all groups and individuals to learn the skills needs to do this, promoting a more peaceful and nurturing environment for all.

### **Strategies**

- Advocate proper nutrition for residents through a health and wellness campaign focusing upon reduction of obesity levels, increasing physical fitness through use of local outdoor recreation facilities, and incorporation of more indoor recreation facilities.

## 2. FOOD SYSTEMS

### Mission

Support existing local food sources while providing distinct incentives for establishing new food sources to remove Bisbee from the list of Arizona food deserts.

Building connections between local food producers and local businesses will develop a positive feedback loop in which food security may become a reality in the Bisbee community. Furthermore, such a connection allows local farmers the opportunity to sustain themselves financially without fear of losing their livelihood, while providing Bisbee residents with educational opportunities around local healthy food and nutrition. Supporting growth in food systems local to Bisbee will provide residents with a healthy, sustainable food source while bolstering the local economy. The addition of new agriculture to the Bisbee community will help keep Bisbee clean: plants provide natural carbon sequestration and water filtering. Utilizing region-conscious agricultural practice provides natural filtration for air, earth and water within the community.

### Policies

- Support the locating of new food stores and businesses in the Historic Old Bisbee and Historic Warren areas within walking distance of neighborhoods to actively address Bisbee as a food desert.
- Support mixed-use zoning and development to provide all Bisbee neighborhoods with food sources in walking distance.
- Support existing, aspiring and future farmers of all scales in the Bisbee area.
- Build connections between local agriculture and local businesses, providing direct routes between Bisbee farmers and Bisbee food stores.
- Educate Bisbee residents about the importance of eating healthy and providing children with proper sustenance for growth and health.
- Support current and future state and federal policies which support local farming.
- Abide by FDA's food safety modernization act (*Reference:* <http://sustainableagriculture.net/blog/new-food-safety-rules/>)

### Strategies

- Provide tax incentives for current, aspiring and future small-scale food store owners located or planning to locate in the Historic Old Bisbee and Historic Warren areas.
- Focus on small plot and integrated farming methods rather than largescale agriculture and greenhouse production to encourage local agriculture which can compete in the Bisbee market. *(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Provide readily available resources for Bisbee residents to learn how to create and maintain gardens. *(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Educate residents on the benefits of small-scale farming as a possibility for accessory income. *(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Promote agro-tourism in Bisbee by advertising existing agricultural practices (such as the Bakerville community garden and Tin Town community garden) and showcasing the unique growing environment which Bisbee is home to. Consider the fact that Bisbee is home to a wide variety of plants impossible to grow in other desert regions due to its elevation and location. *(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Support local meat processing unit locating in Bisbee area.
- Advocate and offer tax incentives for a centrally located food “clearing house” to serve local agriculture.
- Institute a minimum price guarantee for Bisbee farmers selling their produce and products to Bisbee food stores.

### **3. MUNICIPAL TRANSPORTATION**

#### **Mission**

Encourage use of alternative transportation methods (bike, public transit, walking) for both utility and recreation purposes while supporting current transportation infrastructure through upkeep and advertising.

Incorporating more transportation options creates equal opportunities for residents to pursue economic and food security, as well as recreation and socialization opportunities. Providing alternative transportation options will enhance the Bisbee experience by making it a true walking town for residents and visitors alike, allowing bar patrons to drink without the fear of needing to drive and non-drivers the opportunity to travel without a personal vehicle. Offering alternatives to personal vehicles cuts back on pollution while reducing vehicle miles per car, in turn decreasing maintenance and operations cost of local infrastructure. Well-developed multi-modal transportation systems reduce the burden of maintenance and operation on systems solely reliant on personal vehicles.

#### **Policies**

- Establish Multi-modal transportation paths throughout the city of Bisbee.
- Promote bike and pedestrian trails in the mountains and natural environment surrounding the City of Bisbee.
- Promote Transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.
- Explore and expand alternative transportation options which reduce reliance on single-occupancy personal vehicles.
- Ensure that Bisbee public transit infrastructure remains intact indefinitely.
- Support availability of public transit seven days per week including holidays.
- Support low-energy public transit opportunities

#### **Strategies**

- Utilize bike right-of-way signage and signals to provide safe biking paths throughout the Bisbee community
- Increase biker and pedestrian awareness in terms of personal safety, laws protecting their rights, and proper etiquette
- Encourage pedestrians to utilize crosswalks, discouraging jay-walking.

- Establish trail guide for natural environment surrounding City of Bisbee.
- Enhance the Bisbee trail system by incorporating trail signage, route identifiers and wayfinding signage.
- Ensure that all public transit stops are visible and well-advertised.
- Provide covered transit stops to protect waiting patrons from sun and rain.
- Promote the use of the Bisbee Bus by visitors and tourists
- Support electric car infrastructure.

## **4. ENERGY**

### **Mission**

The City of Bisbee will support current municipal measures to reduce city electricity use and establish electrical generating options for use throughout city to decrease reliance on high-polluting energy sources such as fossil fuels.

Reducing Bisbee's energy use by utilizing active and passive methods will provide learning opportunities for both the local and tourist populations. As a regional leader in sustainable practice, Bisbee has the opportunity to showcase the benefits of reducing municipal energy use by advertising reductions as part of a "Clean Energy" or "Low Energy use" campaign. Utilizing alternative energy, clean energy and energy-efficient practices will save the municipal government money and reduce the cost of infrastructure maintenance over time. Further, investing money in clean, energy-efficient technology and strategies for city use will divest monies Bisbee has invested passively in the fossil fuel industry. Reductions in municipal energy use reduce reliance on unclean energy sources. The lower municipal energy use is, the smaller Bisbee's footprint will be; by reducing municipal energy usage, Bisbee in turn will reduce its contribution to local and regional pollution levels.

### **Policies**

- Encourage energy efficient and green energy usage in new building designs.
- Encourage retrofitting existing buildings with green energy, low-energy use and energy-efficient technology.
- Retrofit municipal buildings to be more energy efficient.
- Support education strategy for Bisbee residents regarding proper energy saving techniques, energy efficient technologies, and green energy technologies.

### **Strategies**

- Invest municipal money in clean, energy-efficient technology and strategies for use in city infrastructure. These investments will naturally divest money which Bisbee has passively invested in the fossil fuel industry.
- Incorporate use of low-energy lighting in all municipal buildings on all municipal property.

- Replace city street lights with low-energy solar-powered LED street lights. (*See “Municipal Guide for Converting to LED Street Lighting”*)
- Install automatic light sensors in all municipal buildings.
- Promote planting of shade trees on south and west sides of developments in order to naturally reduce energy used for cooling. (*Adopted from 2008 San Jose Charrette*)

## **5. WASTE MANAGEMENT**

### **Mission**

Support continued efforts to reduce municipal garbage output by maximizing recycling output. Develop economically viable municipal composting infrastructure with inputs by City of Bisbee farmers, agriculturalists, residents, restaurants and local business owners.

Bisbee is a sustainable and socially conscious community: the municipality must have the capacity to recycle all recyclable materials, compost all compostable materials, and ultimately reduce municipal waste by the highest possible degree. Furthermore, the city recycling facility and public efforts put towards increasing recycling efficiency/output must be advertised to the public as a positive example to be followed by city residents. Increasing the capacity and recycling capabilities of the Tovreaville transfer station will reduce the amount of recyclable waste being transferred to the Cochise County solid waste station, reducing the amount of money spent on municipal dumping. Increasing the capacity of recycling and composting within the city reduces Bisbee's waste footprint while helping to decrease the amount of solid waste produced by the city.

### **Policies**

- Encourage Bisbee residents to compost food and yard waste.
- In an effort to kick-start municipal composting, provide free home pick-up for compostable goods to all residents within City of Bisbee limits.
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- Provide leadership regarding ways to reduce physical and liquid waste in City of Bisbee households.
- Provide leadership regarding ways to reduce physical and liquid waste in City of Bisbee businesses and restaurants.
- Utilize existing funding and grant opportunities to increase recycling capabilities of Tovreaville transfer station: the facility must be enclosed and must incorporate the ability to process glass.

### **Strategies**

- Finance free home compostable goods pick-up by selling composted materials to local farmers.

- Incentivize use of community garden plots by offering free compost to community garden users.
- Establish a local materials recycling center for used building and landscaping materials.
- Connect with local community gardeners and agriculturalists to provide pick-up for composted materials
- Print on both front and back sides of paper, to save on paper purchased and being wasted.
- Utilize recycled paper in all municipal printers and copiers to reduce paper waste.
- Use recycled/recyclable and/or compostable trash bags in all municipal trash bins.
- Use only environmentally friendly cleaning supplies throughout all municipal properties and for all municipal cleaning needs.
- Use only environmentally friendly, non-toxic paint and painting supplies on all municipal property.
- Hold hazardous waste disposal events to ensure safe disposal of hazardous materials.
- Permit use of composting toilets within city boundaries.
- Permit use of grey water in residencies within city boundaries.
- Assist local restaurants in the proper disposal of all liquid and solid waste (i.e. grease, grey water, glass, etc.)

## 6. WATER

### Mission

Provide all Bisbee residents and visitors with access to pure drinking water. Strive to preserve increasingly-stressed water sources in and around Bisbee to provide viable water sources for residents and the environment into the foreseeable future.

Bisbee is located in a drought-prone climate where water must not be taken for granted. Water security is a basic human right. Reducing water use will help to secure water for this generation and for generations to come. Reducing municipal water use will in turn reduce the amount of water drawn from Arizona water supply: the less water Bisbee draws, the less money Bisbee must pay for water. Further, lower municipal water use will reduce the strain put on city water waste water plant. Supporting the continued use of recycled water produced by the wastewater treatment facility will assist in further reducing the strain put on Bisbee's water source. As the principal means of sustaining life, water is the single most important factor in retaining the singular beauty of Bisbee's landscape. As an influential southern Arizona city and as a leader in rural sustainable practice, Bisbee must lead the way in terms of region-based practical water usage and water-use reduction.

### Policies

- Ensure safety and purity of municipal drinking water supply for all Bisbee residents.
- Consider all city water – effluent, ground, surface, atmospheric and potable – as valuable commodities in the municipality.
- Strive to protect natural waterways and riparian areas in and around Bisbee through wise and educated water use.
- Ensure the sound material condition and functionality of the city fire suppression and the Arizona Water Company cross connection at the Tombstone Canyon water tank.
- Encourage the use of effluent renewable water sources in place of groundwater-depleting sources.
- Educate Bisbee residents about proper low-water use strategies to be used in homes and on properties.
- Focus on small plot and integrated farming methods rather than largescale agriculture and greenhouse production in order to reduce strains put on the Bisbee water system.  
*(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Educate Bisbee residents on the benefits of storm-water collection and use.
- Utilize remediated water throughout Bisbee.

## **Strategies**

- Install solar powered pumps to supply water from the Wood Canyon Pump House to the Locklin Avenue fire suppression reservoir.
- Install or obtain water treatment systems and install in the Wood Canyon Pump House to treat raw city fire suppression water to create emergency backup potable water.
- Research opportunities to recover wastewater treatment methane for energy production (*Adapted from 2008 San Jose Charrette*)
- Utilize drought-tolerant, low water-use landscaping on all municipal property.
- Use grey water and harvested rain water to water local parks and municipal landscapes.
- Install automatic sensors on water faucets in public restrooms to save water and reduce the spread of infectious disease.
- Install low water-use toilets and urinals in all public and municipal restrooms.
- Fit municipal buildings with storm-water collection technology to be showcased in xeriscape landscaping.
- Install aerators on all public sink and shower faucets.
- Install solar water heaters and on-demand water heaters on all public water utilities.
- Provide instruction regarding ways to reduce physical and liquid waste in City of Bisbee households.

## 7. INFRASTRUCTURE

### Mission

Encourage existing buildings and infrastructure to retrofit with green energy technology, while taking advantage of low-cost energy saving and fixing methods. Require that all new development and structures utilize recycled building materials and/or green energy techniques to keep maintenance costs of buildings and infrastructure low while protecting Bisbee's environment.

Building green infrastructure and retrofitting existing buildings with low energy-use options can become a passive learning opportunity for residents of Bisbee and visitors alike, enhancing the education of the city's younger generation and adding an asset to Bisbee's travel economy. Utilization of green building techniques will ensure that all new buildings and infrastructure have low utility and maintenance fees, keeping costs for building owners as low as possible. Existing buildings should be encouraged to retrofit with green energy sources and/or low energy-use infrastructure (lighting, heating/cooling, etc.) while taking advantage of energy audits and simple techniques to save energy (whitewashing exterior walls, adding shade screens to windows, replacing insulation, etc.). Low costs for maintenance and utilities keeps rent costs as low as possible, encouraging business owners to rent and own both new and historic Bisbee buildings. Utilizing recycled materials in the building process while subsequently fitting infrastructure with green/low energy-use options will mitigate strains which the building process puts on the environment. Green energy fitting and low usage reduces waste from used technology (light bulbs, A/C systems, etc.) going into the waste stream.

### Policies

- Rehabilitate and update Bisbee's existing housing stock to be attractive while preserving historic character. *(Adopted from the 2015 ULI Arizona / City of Bisbee TAP)*
- Rehabilitate and update Bisbee's existing commercial stock to be attractive while preserving historic character.
- Retrofit and update Bisbee's infrastructure with green technology and low-energy-use systems.
- Retrofit municipal buildings with technology to reduce energy and water use.
- Manage and monitor open space through conservation easement. *(Adopted from 2008 San Jose Charrette)*
- Respect onsite topography by limiting environmental impact to within 15 ft. of building footprints. *(Adopted from 2008 San Jose Charrette)*

- Protect onsite vegetation, soil and natural topography during the construction process. *(Adopted from 2008 San Jose Charrette)*
- Encourage new developments to utilize alternative energy options such as solar or wind energy.
- Encourage new developments built on current or purchased municipal land to go through the LEED certification process and/or other green building certification processes through the use of tax incentives and/or reduced purchasing costs.
- Encourage all new developments to use low-impact development techniques and standards. *(Adopted from Sierra Vista 2030 General Plan)*
- Encourage a mix of land uses to help minimize driving distances to services and employment. *(Adopted from 2008 San Jose Charrette)*
- Encourage new high-density residential developments to include recreational facilities and amenities in the site plans. *(Adopted from 2008 San Jose Charrette)*

### **Strategies**

- All new buildings must paint rooves white in order to reflect sunlight and promote low-energy cooling options. *(Adopted from 2008 San Jose Charrette)*
- All new buildings must incorporate sky-lights in the rooves of buildings to promote natural lighting. *(Adopted from 2008 San Jose Charrette)*
- All new buildings and infrastructure must incorporate 70% or more permeable surfaces in landscapes surrounding new structures.
- Take advantage of infrastructure energy audits to identify cost-effective ways in which existing buildings can make small changes and upgrades to physical attributes in order to reduce electricity needs.
- Encourage all existing buildings to paint rooftops white to reflect heat and conserve energy during hot summer months previously used for A/C.
- Paint all municipal buildings' rooftops white to reflect heat during hot summer months.
- Add insulated shading screens to all municipal building's windows in order to block the sun during hot summer months and to insulate rooms during cold winter months.
- Support incorporation of all necessary infrastructure in the Bisbee cemetery.
- Nominate existing buildings and infrastructure for LEED and other certifications.

## **8. POPULATION (HOUSING AND JOBS)**

### **Mission**

Ensure that affordable housing options are available to all Bisbee residents. Ensure that jobs at all levels of skilled labor are available to all Bisbee residents.

Utilize skills-based training to allow Bisbee residents the opportunity to learn trades and provide for themselves and their families. Provide shelter to all disabled Bisbee residents indefinitely, and provide temporary shelter to Bisbee residents who are between jobs. Assist recently-homeless and recently-released inmates in the home and job finding process. Ensure all Bisbee residents equal, walkable access to necessary amenities and/or public transportation.

### **Policies**

- Ensure that all Bisbee residents have equal access to affordable housing, clean water, and food.
- Ensure that all Bisbee homeless residents have equal and proper access to shelter, clean water and food.
- Strongly encourage able-bodied Bisbee unemployed residents and/or welfare recipients to go through job-skills training.
- Encourage and incentivize the citing of new small-scale food stores within walking distance of residents in order to provide access to necessary amenities and jobs.

### **Strategies**

- Assist Bisbee residents with finding work in the Bisbee community.
- Assist homeless and recently-released inmates living in Bisbee with finding work in Bisbee.
- Empower Bisbee activists to create trade-training programs for members of the Bisbee community.

## **9. EDUCATION**

### **Mission**

Provide top-notch education in schools, easily accessible education outlets for all city services, and provide information for healthful living to all Bisbee residents and visitors.

Education is the core of any community which strives to cultivate and build upon its natural assets to provide for its future generations. Educating Bisbee residents is the key to connecting both children and adults with positive opportunities for success. Drawing new families to the community is dependent upon schools, extracurricular activities and the social environment found in Bisbee. Parents must feel that their children have access to education from local schools as well as social opportunities from extracurricular activities. The city is currently deficient in terms of professional work, which makes living in the community difficult for up-and-coming professionals who must provide for their families. Ensuring the quality of schools for all grade levels will draw young professional teachers to the city while also drawing families to those schools. Capitalizing on historic and environmental educational opportunities which Bisbee can offer will draw research institutions to the city, in turn bringing professionals from various fields to Bisbee. Successful multigenerational communities are those which support education of all residents; bringing education to the front and center of Bisbee culture will help to build a strong community of multigenerational professionals which will allow the city to sustain and prosper indefinitely.

### **Policies**

- Strive for the highest quality education in schools in the Bisbee Unified School District.
- Ensure sufficient funding to all schools in the BUSD.
- Provide funding for juvenile extracurricular activities, including but not limited to the arts and sports that are appropriate for all, including those who are differently abled.
- Create educational opportunities for adults, including those who are differently abled, living in the Bisbee community.
- Create additional educational opportunities for all children, including those who are differently abled.
- Provide opportunities for all generations of Bisbee residents to learn how to safely and sustainably interact with their surrounding environment.
- Provide opportunities for all generations of Bisbee residents to learn about their city's rich history and cultural heritage.

## **Strategies**

- Utilize Bisbee's natural environment to draw educational institutions to the city for research.
- Utilize Bisbee's historic infrastructure to draw educational institutions to the city for research.
- Provide more educational opportunities to learn about the diverse culture in the Bisbee area

## **10. RESOURCES**

The City of Bisbee has, and generates, various resources which rightly belong in a sustainability plan, but which do not fall readily into the previous nine sections. These may include the use of native rocks for paint pigments, plants which could be used in dyes for fabrics, and even the retention of treated waste water. Given that this is a living document, the section is intended as a place holder for future consideration by the Commission and for input by other contributing parties.