

The Bisbee Area Mobility Master Plan

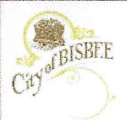


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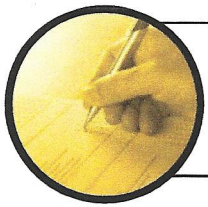
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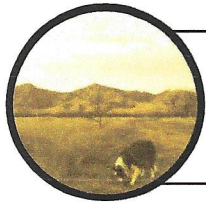
Public Engagement

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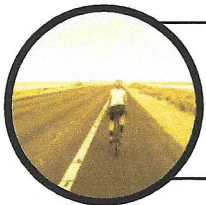
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Plan Goals

- **SAFETY AND COMFORT: MAKE CONDITIONS SAFER FOR NON-MOTORISTS**
- **HEALTH: PROMOTE HEALTHY LIVING BY ENCOURAGING WALKING & BIKING**
- **CONNECTIVITY: PROVIDE DIRECT, EFFICIENT CONNECTIONS**
- **INCLUSIVITY: MAKE BISBEE MORE ACCESSIBLE AND INCLUSIVE**
- **VIBRANCY: PEDESTRIAN ACTIVITY PROMOTES VIBRANCY & TOURISM**
- **ENVIRONMENT: REDUCE CARBON EMISSIONS**
- **MORE EFFICIENT LAND USE PATTERN: REDUCE PARKING DEMAND**

The Bisbee Area Mobility Master Plan (BAMMP) represents a joint effort by the City of Bisbee and Cochise County. The primary goal of this effort is to plan for, and aid in the development of, non-vehicular mobility options throughout the City of Bisbee and the unincorporated area directly south of Bisbee, including the Naco townsite.

Safe, well maintained shared-use paths are a critical part of the transportation network. This plan contemplates various forms of transportation improvements geared towards residents and visitors of the greater Bisbee area. A shared-use network of trails, sidewalks, and pathways can provide year-round walking, running and cycling that will enhance access to destinations and encourage economic redevelopment and infill.

The advantage of having a truly walkable community are well documented. Walkable communities are associated with:

- Increased property values
- Reduced carbon emissions
- Increased demand for business/services
- Increased safety
- More equitable opportunities
- Additional job opportunities
- Improved overall quality of life
- Increase in physical activity leading to health benefits

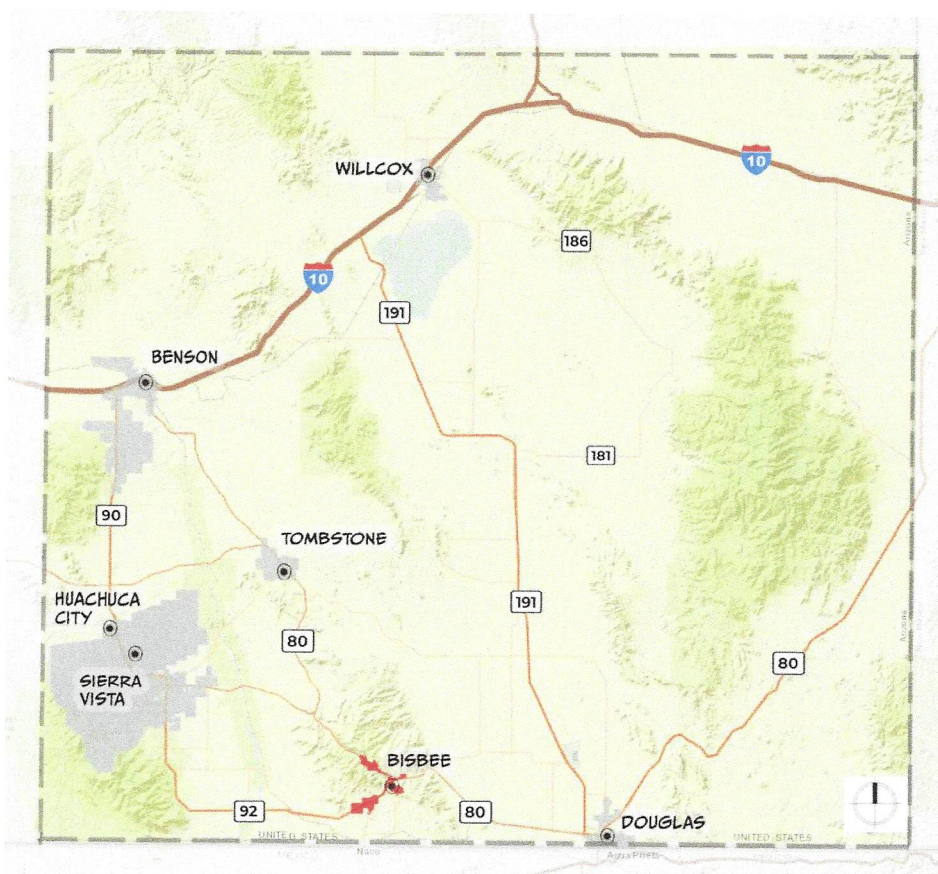
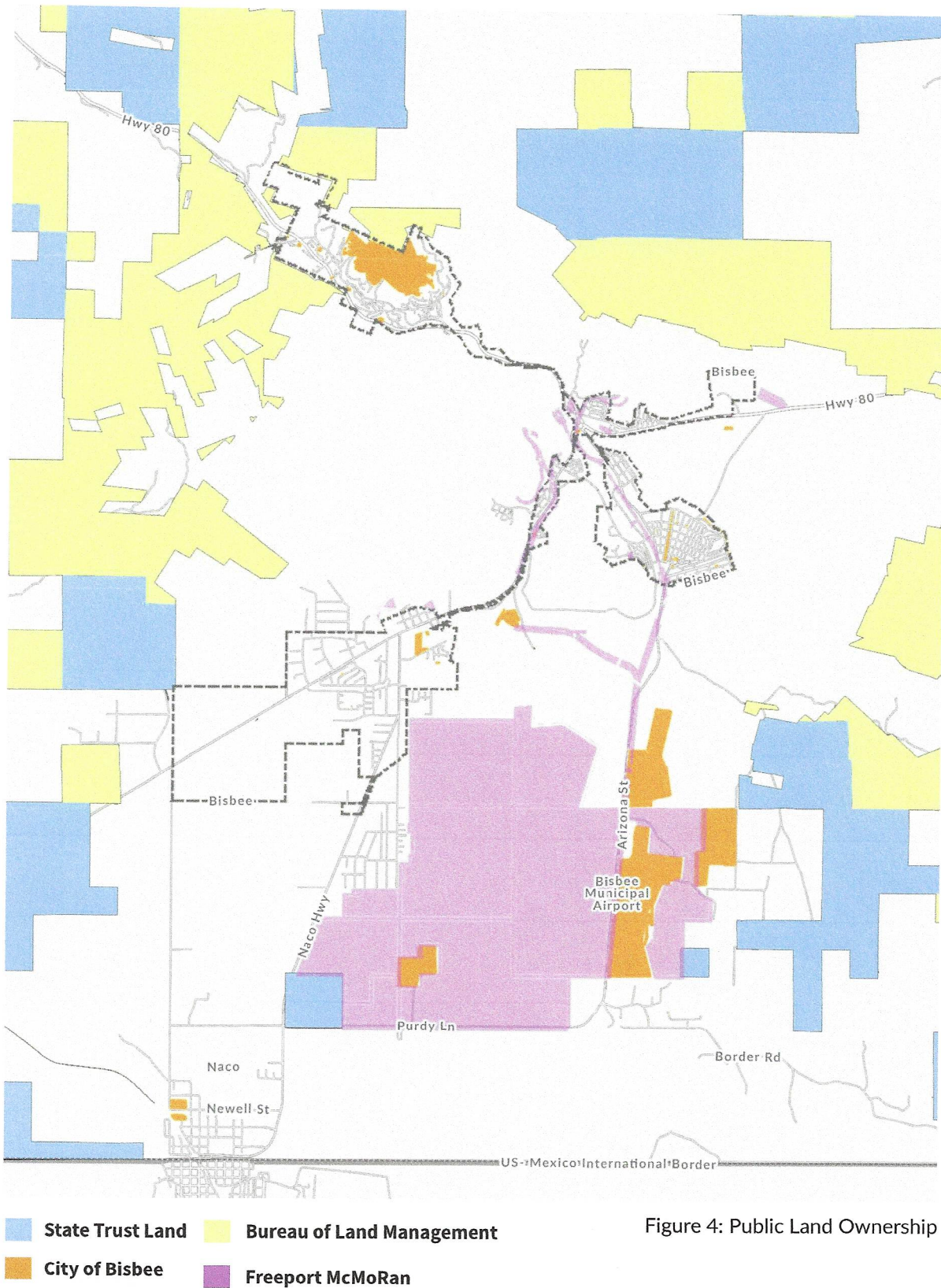


Figure 1: Cochise County

Public Land and Freeport McMoRan Property



Land Ownership

Focusing development of trails/recreation improvements on publicly owned land and/or area within the right-of-way reduces land acquisition costs and increases implementation feasibility.

Figure 4 illustrates the location of federal land (BLM), state land (State Land Trust) and City property within the study area.

It should be noted that approximately 21% of the land within the study area is owned by the international mining company Freeport McMoRan. This includes the land on which all major roads sit, connecting each of the Bisbee subdistricts as well as the Lavender Pit and mountainside to the west of the Pit to one another.

Figure 4: Public Land Ownership

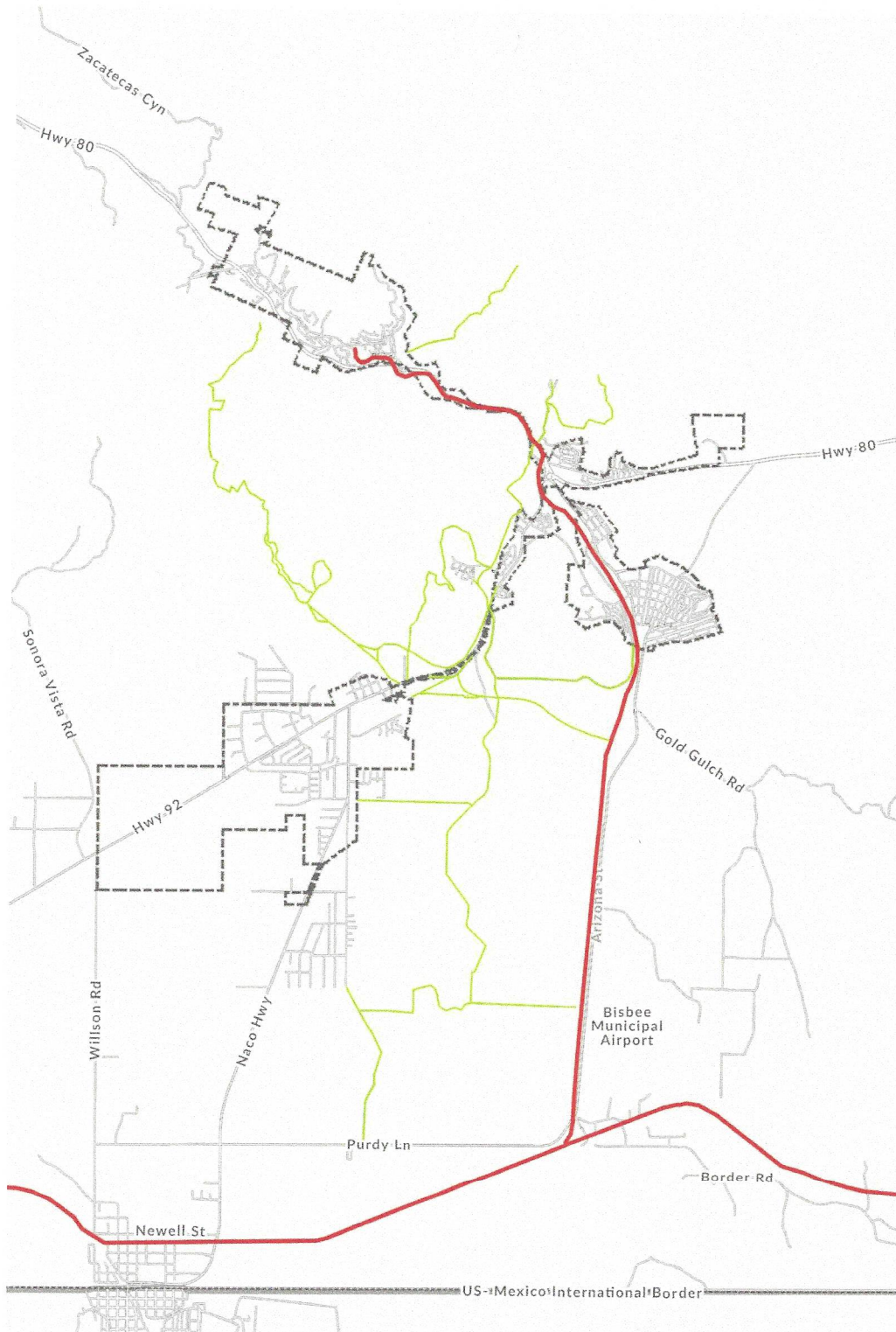
Sun Corridor

The Sun Corridor Trail (SCT)

is a planned trail that, when completed, will link Las Vegas to Douglas, Arizona.. Implementation of the SCT will rely on a partnership among the state and federal government, various municipalities, nonprofits, and private landowners. To the extent possible, the corridor follows abandoned rail lines. Of note, within the study area, a portion of the trail extends parallel to Highway 80 and the Lavender Pit, linking Old Bisbee to the Warren District and the Naco townsite.

The development of the Sun Corridor presents one of the best opportunities for regional non-vehicular connectivity. In addition, it may also lead to an increase adventure tourism to Bisbee and the international port of entry in Naco.

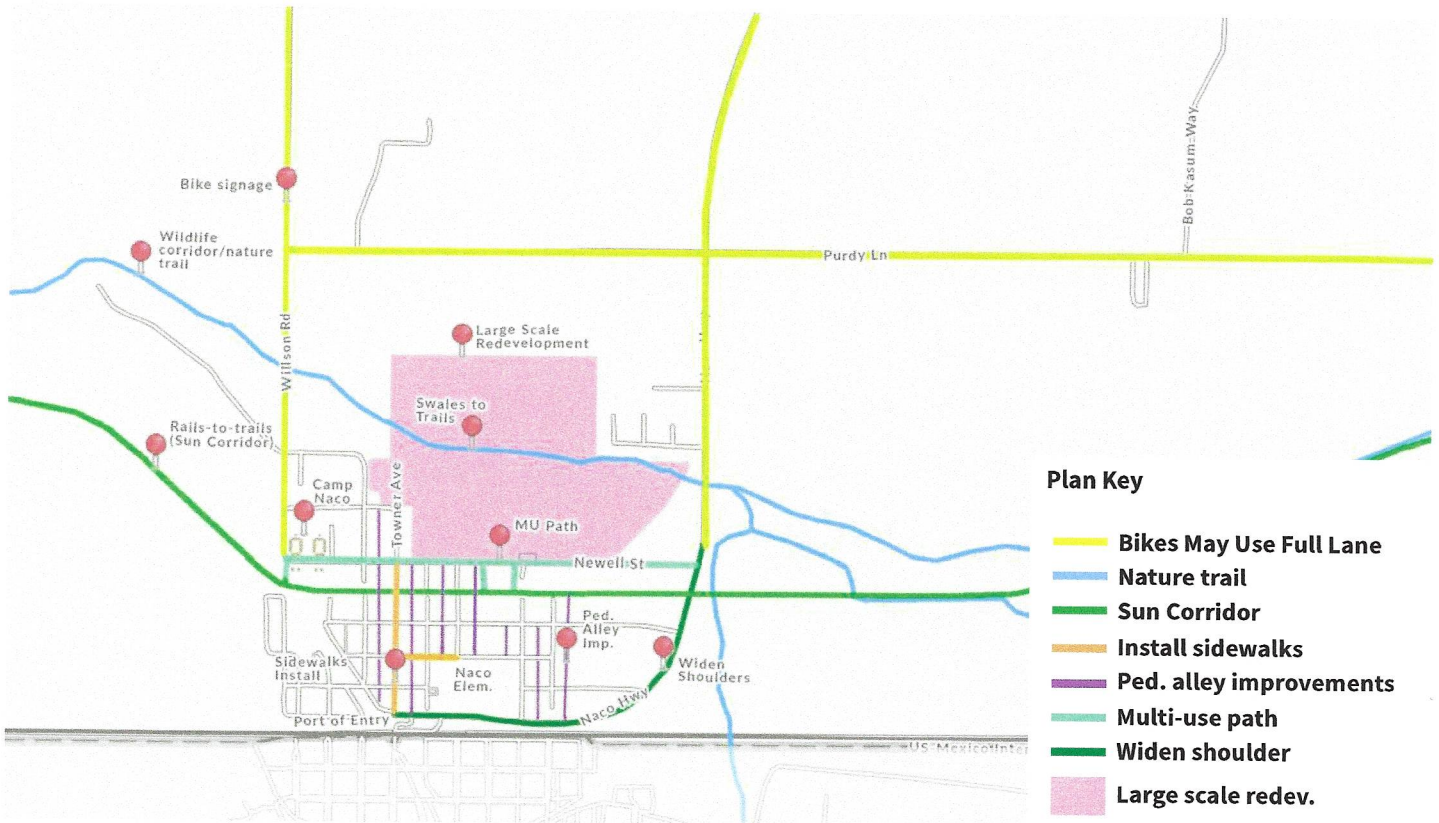
In addition, there are numerous graded, but unimproved, mining paths throughout Bisbee. The land on which they sit is primarily owned by Freeport McMoRan. Easement acquisition and trail improvement would provide additional connectivity in this region. A complete preliminary map of the SCT is included in the appendix of this document.



— Conceptual Sun Corridor Alignment
— Mine Trail

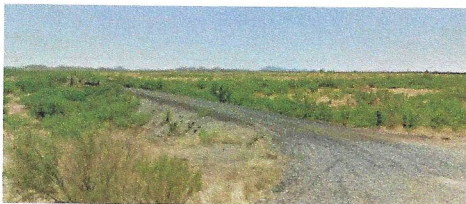
Figure 7: Conceptual Alignment of the Future Sun Corridor Trail with Mine Trails

Figure 18: Naco Recommendations

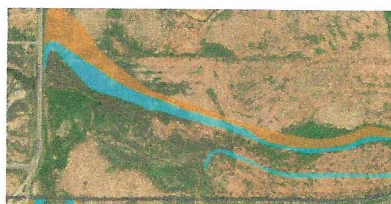


Plan Key

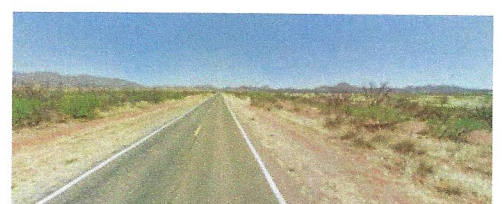
- █ Bikes May Use Full Lane
- █ Nature trail
- █ Sun Corridor
- █ Install sidewalks
- █ Ped. alley improvements
- █ Multi-use path
- █ Widen shoulder
- █ Large scale redev.



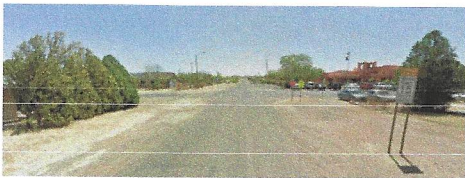
1. The Sun Corridor Trail is a rails- to-trails project that will provide regional connectivity between Nevada to southern Arizona. Within the Naco Townsite, this trail will follow the existing east-west San Pedro/Union Pacific rail line. This corridor connects with a north-south trail route approximately 3 miles of east of Naco.



2. Greenbrush Draw is a significant wash and designated floodway within Cochise County. There are strict development limits in and around this corridor, which provides opportunity for its preservation and use as a wildlife corridor/nature trail.



3. Naco Highway is a minor arterial road that connects the port of entry and the eastern side of Naco to Bisbee. There is a paved shoulder on both sides of the roadway. The width of the shoulder varies considerably. The dark green portion of the road shoulder in Figure 18 is approximately 3' in width. This should be extended to match the 8'-10' in width of the road shoulder that begins 400' north of the Newell Road intersection. This improvement can occur during the next scheduled maintenance resurfacing.



4. Towner Avenue and Valenzula Street:

Naco Elementary draws students from both sides of the international border. There is a significant amount of school-age pedestrians that would benefit from an enhanced pedestrian system to-and-from the border to the school. The most direct connection is along Towner Avenue to Valenzula Street. Continuous sidewalks are recommended where indicated on Figure 18. Towner Avenue serves as the historic downtown commercial corridor for Naco and is an important international gateway.



8. Large Scale Redevelopment The two parcels indicated in pink on Figure 18, encompass 200 acres of privately owned land, zoned recreation/open space. These parcels are the site of the formal Turquoise Valley Golf Course. While at this time it is unknown how or when this property will redevelop, it is unlikely that it will be restored into a golf course. It is recommended that, in conjunction with any redevelopment, the County shall request the applicant apply for “Planned Development” rezoning, which requires that a minimum of 50% of the site be set aside for recreational use.

5. Pedestrian Alley Improvements

Naco is connected by a residential alley network. Increasingly, nationwide, there is a trend to transform alleys from service corridors into desirable public space. High quality alleys should include lighting, paving, and, potentially, additional vegetation and public art. With additional shade, slower speed limits and direct connections to residential spaces, the transformation of alleys can help connect some of the most vulnerable of the population, such as the children and elderly, to important destinations and other trails.

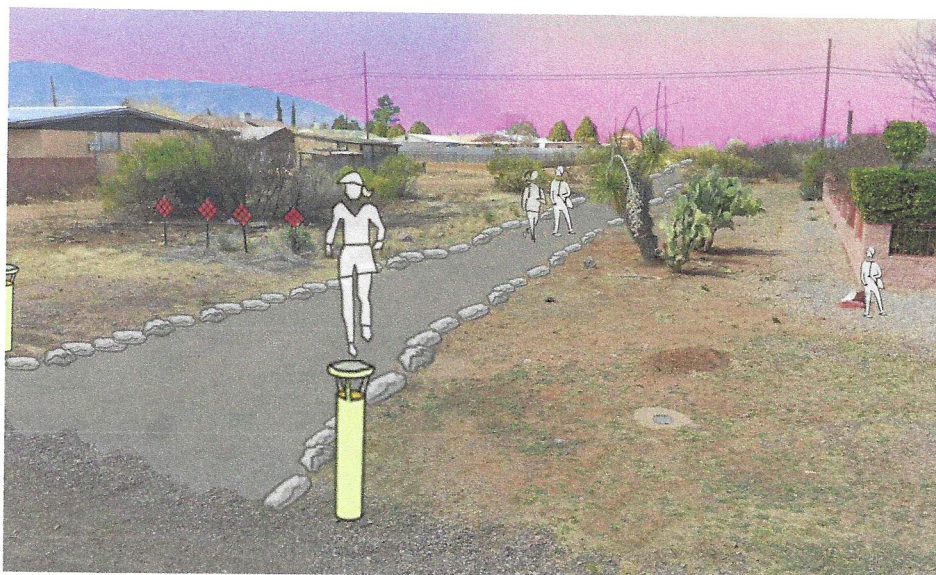
6. Newell Street is one block north of the proposed east-west Sun Corridor trail. This low volume road, which includes a residential RV park and a large-scale (200 acre) redevelopment site, presents a good opportunity for a future paved multi-use trail on the southern side of the roadway. Connections to the Sun Corridor Trail can be made through existing easements, where indicated in Figure 18.

7. Camp Naco Grant funded work is underway on the rehabilitation and enhancement of Historic Camp Naco. The improved site will include community meeting space, a museum, community farm, and outdoor community event space. The project is anticipated to be complete in 2027.

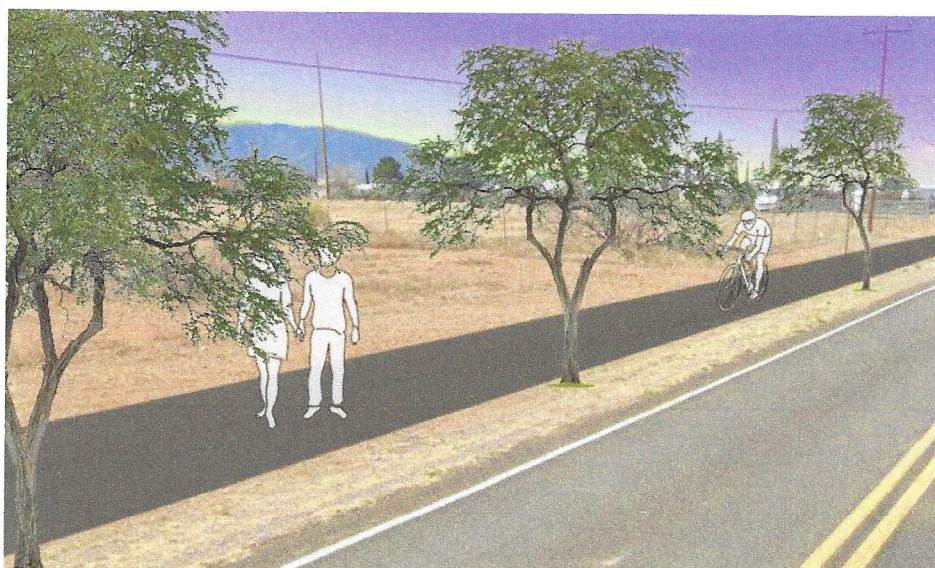


9. Bike signage The plan recommends the installation of “Bicycles May Use Full Lane” signs, where indicated on Figure 18. The intent of the sign is to encourage motorists to change lanes in order to pass bicyclists. The installation of these signs is most important along roadways where bicyclist travel is common and desirable, but the constrained right-of-way leaves roads with lanes that are too narrow to be safely shared side-by-side by a bicycle and a vehicle for travel. Within Naco, Purdy Lane and Willson Road are good candidate roads for this signage.

The Naco Townsite

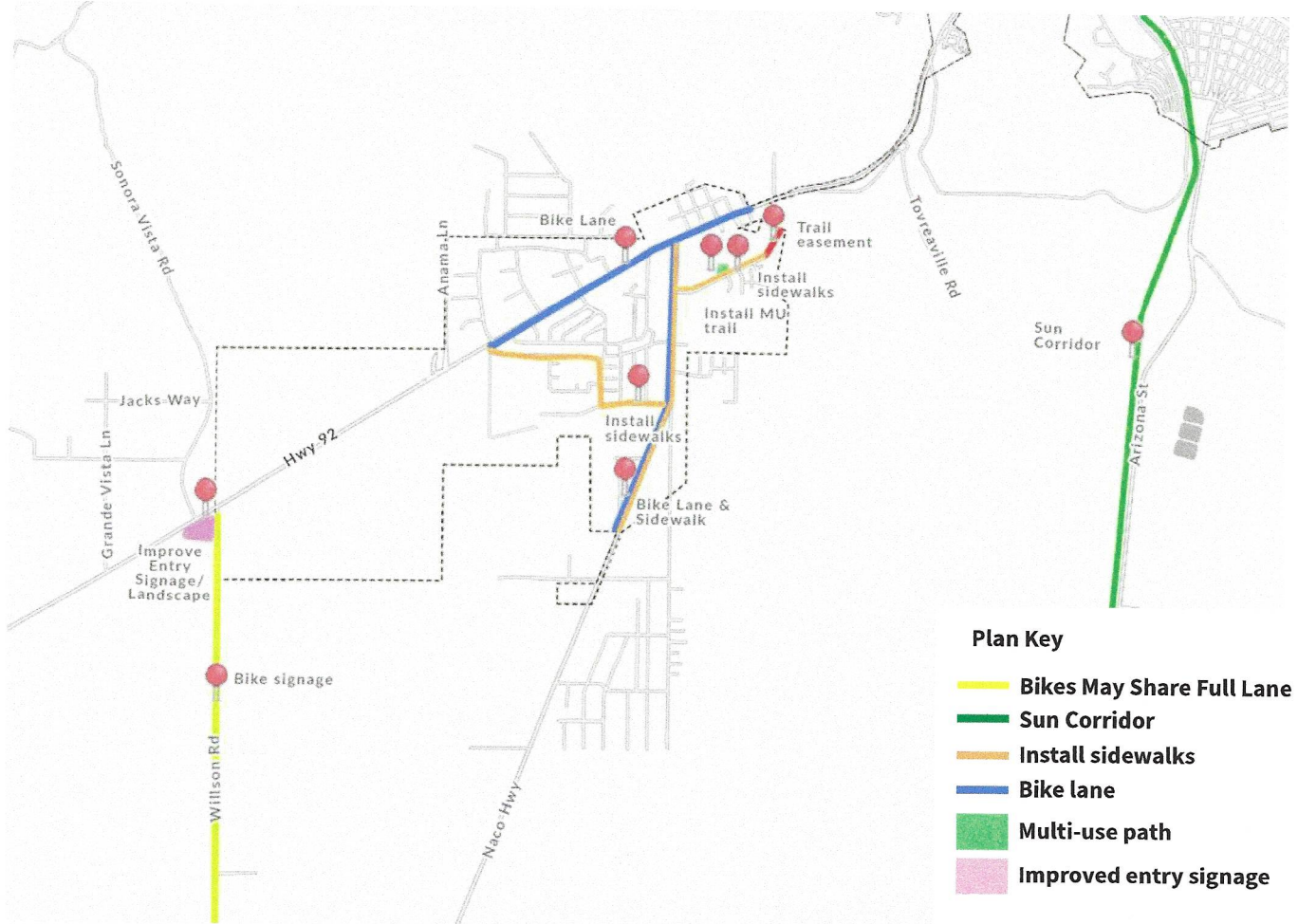


Sun Corridor Rails-to-trails



Newell Street Multi-Use Path

Figure 19: San Jose Recommendations

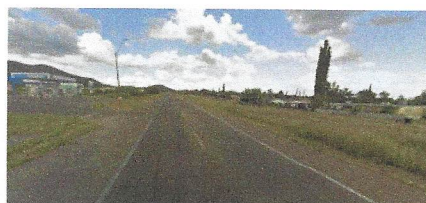


Plan Key

- Bikes May Share Full Lane
- Sun Corridor
- Install sidewalks
- Bike lane
- Multi-use path
- Improved entry signage



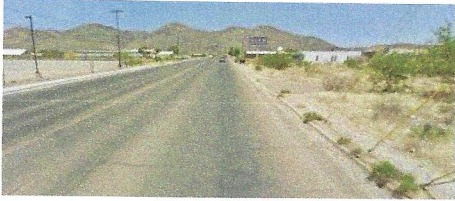
1. Improved entry signage and landscape the San Jose entry, where indicated in Figure 19, is a major City gateway. To date, there is a only a small regulatory sign that indicates the City limits. The City should coordinate with ADOT to replace the current sign with upgraded landscape and entry signage.



2. Bike Lanes (Hwy 92). Highway 92 is a minor arterial. Currently there is a wide shoulder. Marked and signed bike lanes are most appropriate in the locations indicated in blue on Figure 19. There is a higher degree of development and more frequent curb cuts than the segments of the road that are not color coded.

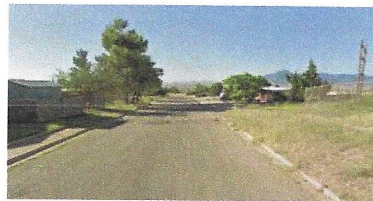


3. Mixed Use Trail Connection (between the senior center and the grocery store). There is an undeveloped 8.65 acre City owned parcel, connecting the senior center to the rear of the grocery store. Installation of a mixed use trail is recommended on this parcel to provide additional recreation for senior center users and to provide an alternate connection to these two uses.



4. Bike Lanes and Sidewalks (Naco Highway). Naco Highway is a minor arterial. Marked and signed bike lanes are most appropriate in the locations indicated in blue on Figure 20. There is higher degree of development and more frequent curb cuts once the road enters the City's jurisdiction. In addition, the City portion of Naco Road includes a curb and gutter stormwater conveyance system, however there is no paved shoulder. A sidewalk is present along some of the corridor. Where a sidewalk is not included, there is considerable wear to the ground, indicating frequent use by pedestrians and a need for a paved sidewalk surface.

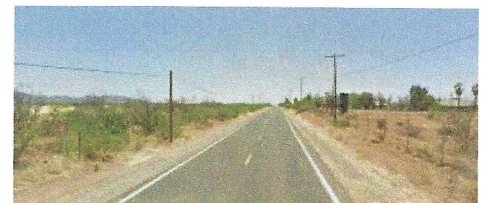
Alternatively, along this portion of Naco Highway, the City could consider reducing the number of lanes from four lanes to three. A road diet in this area would provide more room for non-vehicular travel and a buffer for pedestrians, similar to the pedestrian improvements being considered near the Lavender Pit. This recommendation is significantly more expensive than a sidewalk and bike lane suggested above and would require a traffic study to verify its impact on Naco Highway's road capacity.



5. Sidewalk Improvements
There are few sidewalks within the San Jose District. Based on existing land use, land ownership, potential to connect to the larger trail network, and bus routes, additional sidewalks could be most beneficial where indicated in orange on Figure 19. The Melody Lane/San Jose Drive/Hereford Road sidewalk generally follows the bus route in the area and would connect County and City facilities. The Collins road sidewalk could provide a back route for shopping along Highway 92 and connect to a future Sun Corridor Spur.

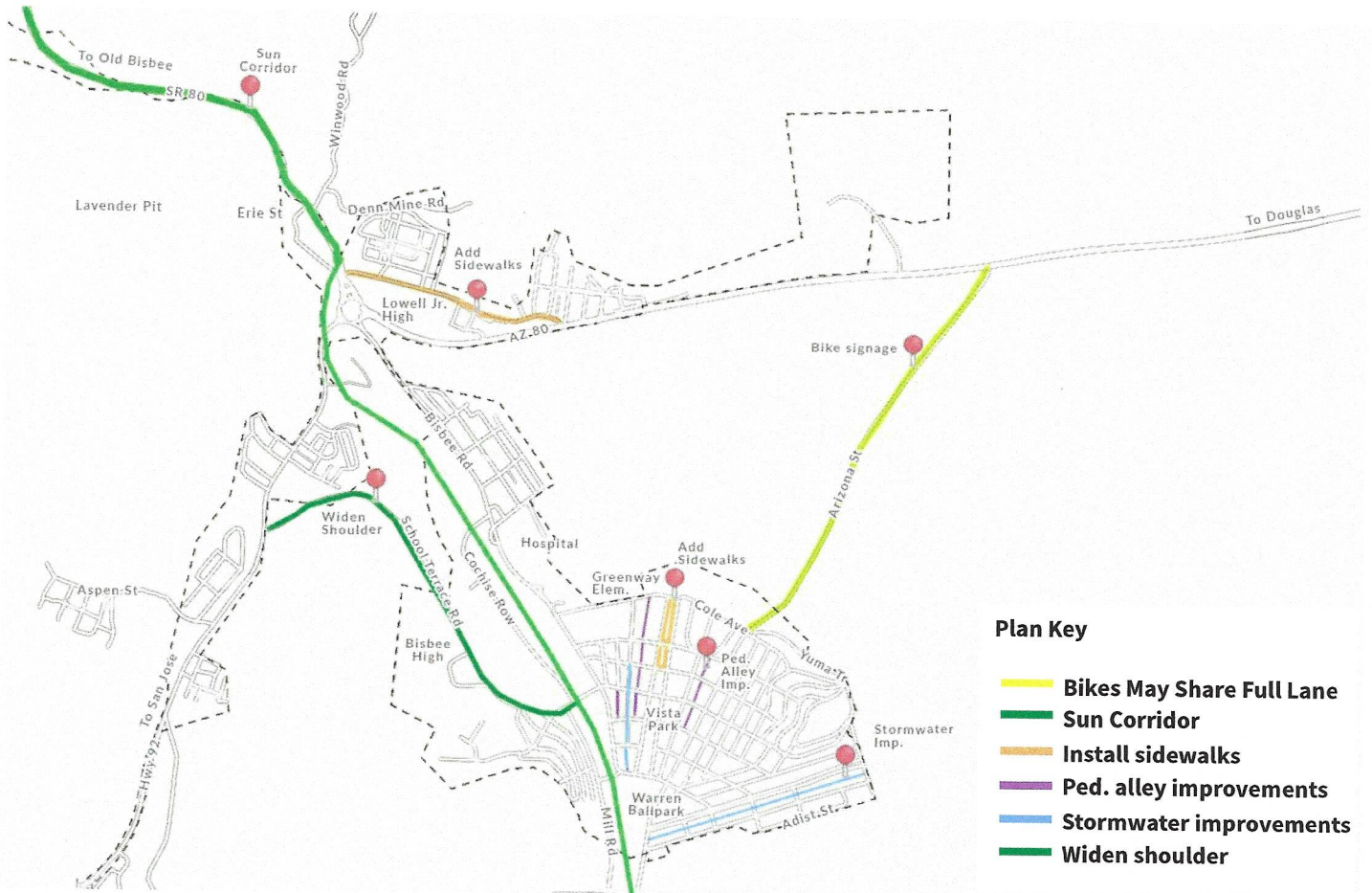


6. The Sun Corridor Trail is largely a rails-to-trails project that will provide regional connectivity between Nevada to southern Arizona. The conceptual alignment does not enter into the San Jose District. However, there is an east-west rail easement (see Figure 19) that could connect San Jose to the Sun Corridor alignment, the Bisbee Municipal Airport and the Warren District. Also there is an easement abutting the north side of Highway 92 which could provide a faster and looped connection to Old Bisbee.

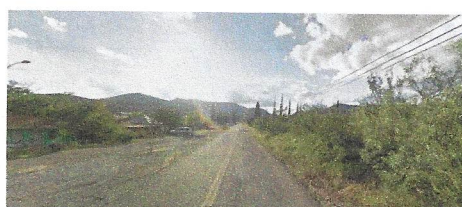


7. Trail Easement. The red line in Figure 19 indicates where Collins Road and the rail easements end and are separated by 15.75 acre privately owned property. This commercially zoned property is currently undeveloped. Ideally, a trail easement could be created on the property to connect Collins Road, and the San Jose District, to the regional trail network.

Figure 20: Warren Recommendations



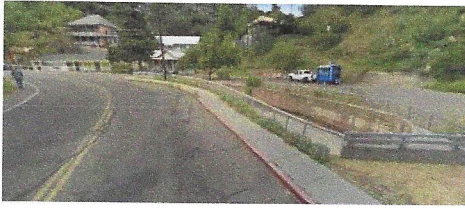
1. The Sun Corridor Trail is largely a rails-to-trails project that will provide regional connectivity between Nevada to southern Arizona. Within the Warren District, this trail will follow the existing north-south easement owned by Freeport McMoRan, where indicated in Figure 20.



2. Sidewalk Improvements
There are many non-continuous sidewalks within the Warren District. The locations illustrated in Figure 20 are considered near-term sidewalk recommendations due to their proximity and connections to Greenway Elementary and Lowell Junior High as well as the northern limits of Vista Park.



3. School Terrace Road is a major collector road. It is along the public bus route, and directly connects to Bisbee High School. The road is somewhat removed from the greater community; however, for the reasons just stated it still attracts a significant amount of non-vehicular activity. Bike enhancements, in the form of a wider shoulder are recommended, to promote safer bike travel to and from school.



2. Improve/beautify stormwater treatment within the downtown. The city must maintain and direct stormwater off Tombstone Canyon Road. This road was constructed in a floodplain, like many others constructed during the time. There is a ditch system present in places, consuming right-of-way. To the maximum extent possible, this system should be improved and maintained to make it aesthetically pleasing stream and a part of the overall streetscape while maintaining its functionality directing water off the road. Cleaning of the ditches immediately prior to the monsoon season, as well as more frequent maintenance during the rains, is recommended. Decorative railings are suggested, due to their dual purpose as a low-maintenance safety and aesthetic improvement. Murals along vertical walls could also be considered.



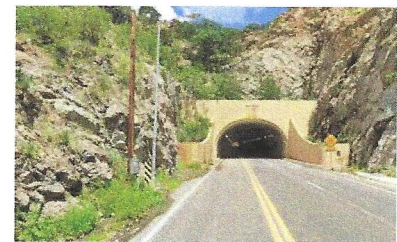
3. Improve Landscape and Signage at the District Entry
Coordinate with the landowner Freeport McMoRan and ADOT to install upgraded landscape and entry signage within the grassed medians, at the southern district entry.



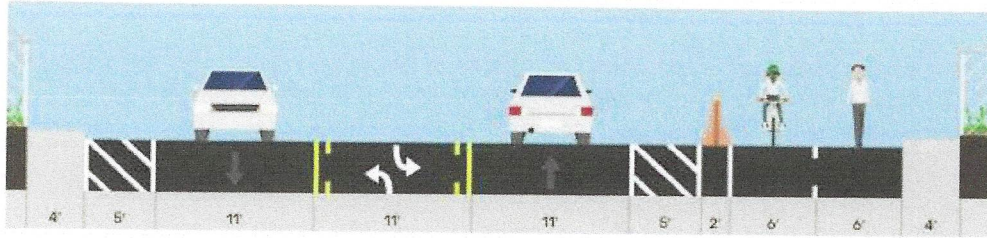
4. The Sun Corridor Trail is largely a rails- to-trails project that will provide regional connectivity between Nevada to southern Arizona. A feasibility study for a multiuse path adjacent to the Lavender Pit on Highway 80 was initiated by the City in November of 2020. Ultimately, that study advocates for the construction of a shared use path along Highway 80. Within the Old Bisbee District, the proposed alignment shifts from railroad easement to placement on Highway 80/ Tombstone Canyon Road. Given the limited right-of-way and sharp grade changes, this will likely require the conversion of one lane of car travel into a non-vehicular multi-use path adjacent to the Lavender Pit. Within Old Bisbee, there is little potential to expand the sidewalk or include a multi-use trail, given the need to retain on-street parking and the canal stormwater system. Consequently, the trail will need to transition from a wide multi-use trail to a more narrow sidewalk along Tombstone Canyon Road within the retail area.



5. Convert parking stalls to bike corrals along Main Street/Tombstone Canyon. Given the limited sidewalk space along Main Street, a more efficient bike parking solution could be the conversion of a limited number of parking stalls to “bike corrals,” which are located in the street area adjacent to the curb. Each corral can accommodate 8-12 bicycles. The photo above is a San Francisco example that includes a geometric mural from artist Kristin Farr. Ideally, bike corrals can make better use of on-street areas that are poorly suited for automobile parking, and/or areas near intersections.



6. Improve non-vehicular bypass to the Mule Pass Tunnel. The Mule Pass Tunnel is currently not a safe bicycle or pedestrian route. There is some consideration of reducing the number of lanes from three to two, to allow additional room for non-vehicular travel through the tunnel along wide shoulders. Unless or until these changes are made, non-vehicular travel should be routed to West Boulevard and Old Divide Road to bypass the tunnel.



SR80 Lavender Pit Multi-Use Path

| | | | | | | |
|----------------|-----------------------|------------------|-----------------------|----------------|----------------|-----------------|
| Paved shoulder | Westbound travel lane | Center turn Lane | Eastbound travel lane | Paved shoulder | Raised barrier | Shared use path |
|----------------|-----------------------|------------------|-----------------------|----------------|----------------|-----------------|



* Graphic courtesy of Kimley-Horn Engineering

Adoption

This study is a collaborative effort between the City of Bisbee, Cochise County, and the non-profit entity Bisbee Bikeways. This is geographically advantageous because of the proximity between Bisbee and unincorporated Naco. Naco provides a connection between Bisbee and the international border. In addition, recently, efforts to connect these areas via the Sun Corridor trail system planning process have begun in earnest.

From an implementation standpoint, the presence of two jurisdictions, subject to different regulations, decision-makers and budgets, can complicate implementation strategies. In this section of the document, the adoption process of this document and implementation measures are discussed. To the greatest degree possible, this study contemplates using the processes and staffing currently available.

Bisbee Adoption Several previous planning efforts, including this City's General Plan, have referenced the need for an additional study of the multi-modal transportation network. This plan will be adopted as a stand-alone document that should be referenced in future updates to the General Plan. Specifically, it is recommended that the City include Figure 22: Multimodal network within the transportation section of the next update.

County Adoption Portions of this plan that recommend specific projects or upgrades to the Naco Townsite can be added via an staff-initiated amendment to the existing Special Area Plan for Naco. Area plans are included in the Comprehensive Plan and address the future growth of a specific community or region of the County. They offer an opportunity for citizens who live and work in an area to have a voice in the location, type, and intensity of growth in their community. To date, seven community plans have been adopted within the County. In addition, the County should add the proposed location of the proposed Sun Corridor to the transportation section of the County's Comprehensive Plan within the next update.

Policy Implementation

Following adoption, there will be the opportunity to amend the City and County's zoning regulations. The purpose of zoning is to guide the development or redevelopment of land in accordance with the jurisdiction's General Plan/Comprehensive Plan, and to promote the public health, safety and general welfare of the residents. Zoning districts specify permitted land uses, minimum lot sizes, and certain site development standards including bicycle parking, sidewalk installation and setbacks from roadways.

Bisbee Zoning Recommendations:

- Mandate the inclusion of bicycle parking and sidewalk installation within new development.
- Specify additional multi-modal improvements within Master Development Plan districts.

County Zoning Recommendations:

- Amend the zoning regulations to require bicycle parking, sidewalk installation within new developments (within Naco)

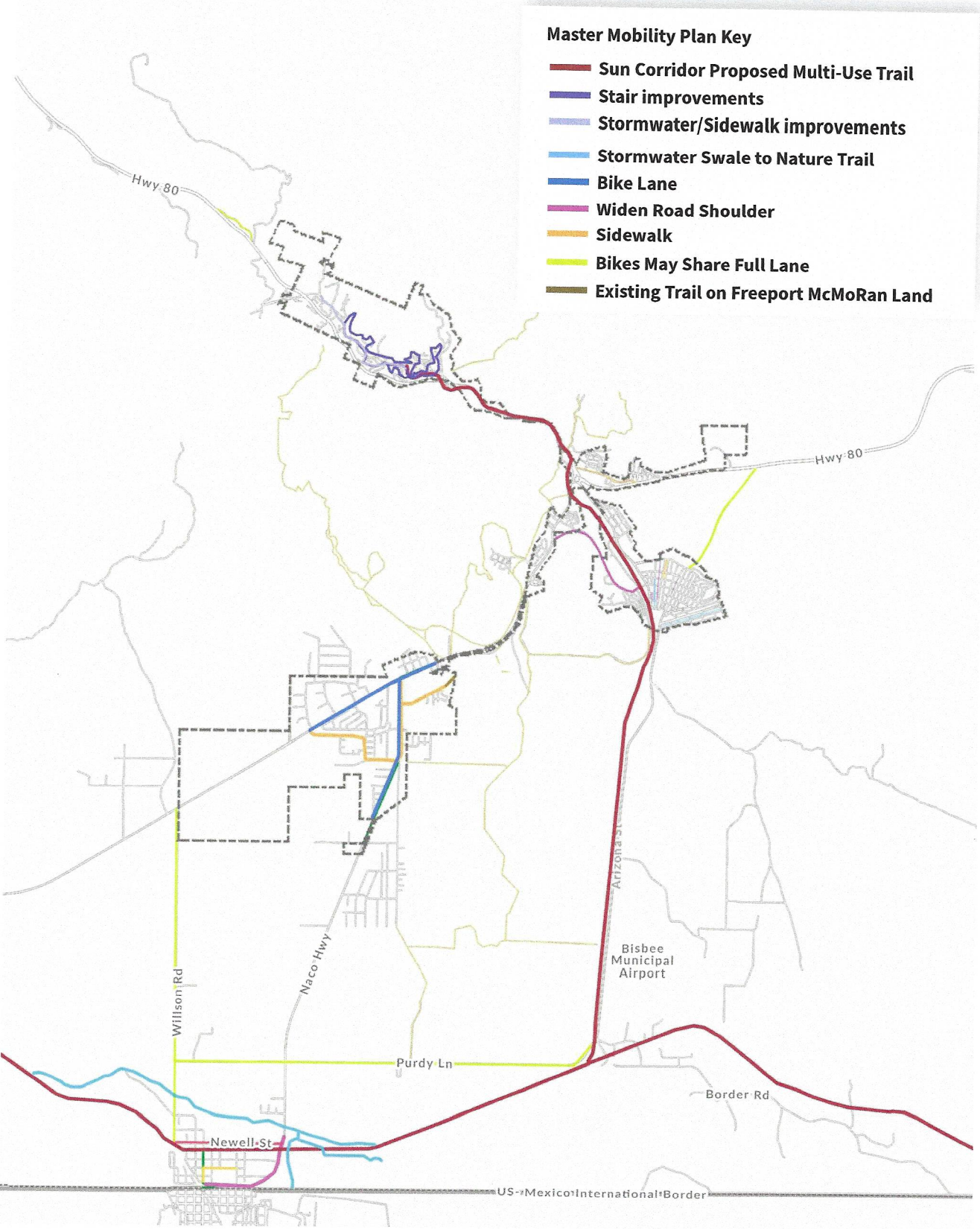
Administrative Recommendations, City and County

- Continue to actively participate in regional efforts to create the Sun Corridor. Consider designating a member of staff and/or a Council liaison to lead these efforts. Also, consider the inclusion and placement of crosswalks to facilitate street crossings near the proposed alignment.
- Continue to collaborate with the Bisbee Bikeways, a local nonprofit entity that spearheaded this effort and continues to be the driving force toward implementation- successfully applying for \$8.5 million in grants that have now been awarded to the City of Bisbee.
- The City/County should continue to coordinate with Freeport McMoRan to increase areawide connectivity using a portion of the trails on their property. Currently, the trails indicated in brown on Figure 22, are not available for public use. As the largest private landowner in the study area, Freeport McMorRan is a critical stakeholder. If the entity decides to open a portion of their property to the public, the City/County should assist in development of easement agreements on the mine trails, prioritizing segments that increase connectivity between Bisbee districts.
- Include the infrastructure projects specifically referenced within Chapter 5 as future Capital Improvement Projects within the annual budgeting process.
- Consider the adoption of a Complete Streets policy that directs future investment in transportation infrastructure to consider the needs of all users.
- Consider pursuing the Colonia designation for portions of the City to have access to additional CDBG funding.

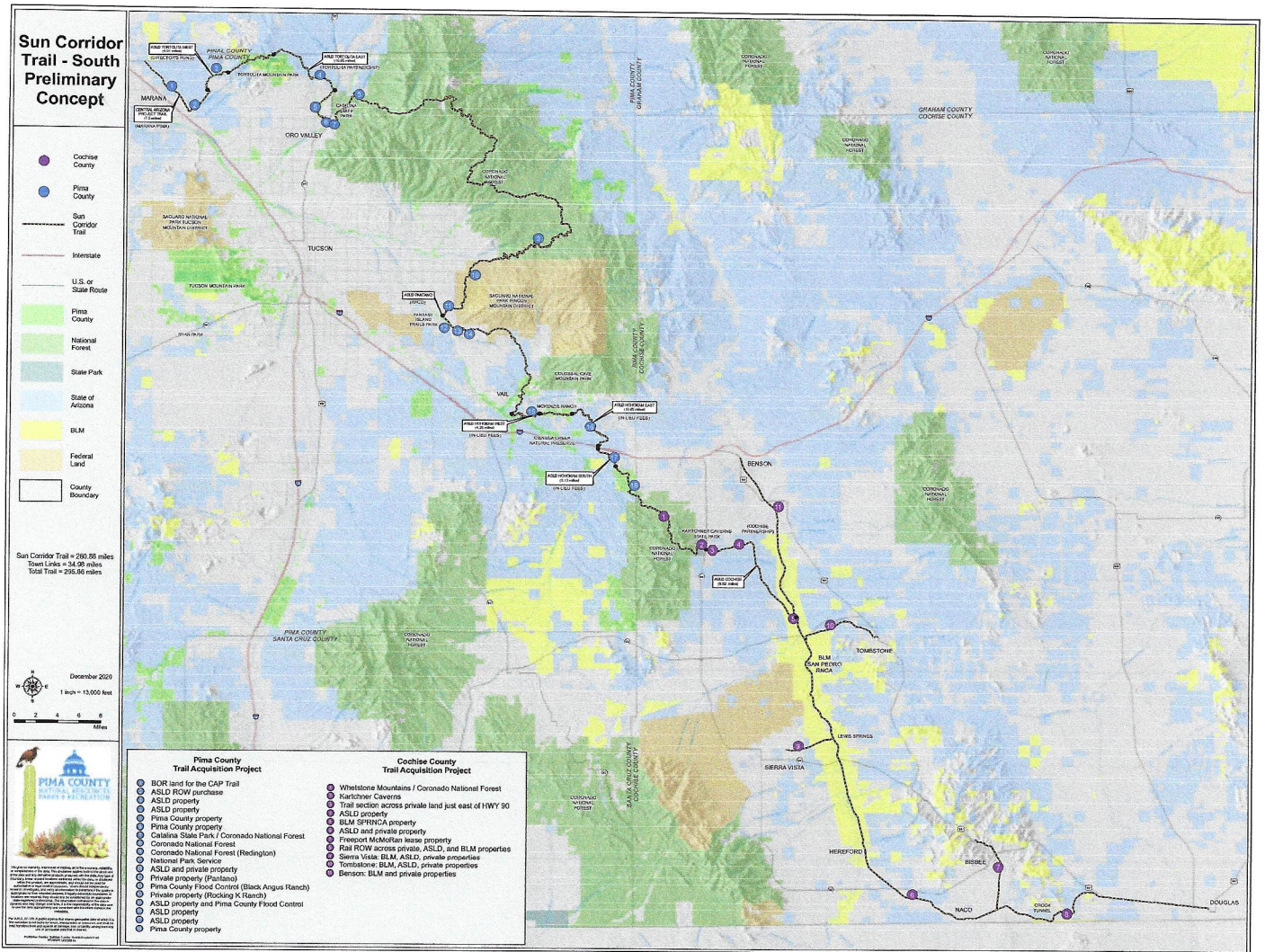
Transit Recommendations

- Retrofit bike racks on all buses to facilitate inter-modal travel.
- Include bicycle racks at all fixed bus stops.

Figure 22: Multimodal Network



APPENDIX: Sun Corridor Trail South Preliminary Concept



On January 5, 2021 the Cochise County Board of Supervisors voted to approve a Memorandum of Understanding (MOU) supporting the Proposed Sun Corridor Trail, among Arizona State Park and Trails, and the counties of Pima, Cochise, Mohave, Coconino, Maricopa, Pinal and Yavapai. The MOU represents formal support from all the counties through which the proposed Trail will run to the Arizona State Parks and Trails Department.