



City of Winslow PARA North-South Transportation Plan

Task Assignment MPD 23-10

April 30, 2012

Executive Summary



HDR



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1.0 Introduction

The City of Winslow (City) North–South Transportation Plan (Plan) is a multimodal plan, addressing improvements to the vehicular road network within and around the City of Winslow in addition to transit, bicycling, and pedestrian facilities. The need for new facilities is predicated on the growth that is occurring within the City of Winslow, Navajo County, Coconino County, and the region as a whole. While this growth has slowed considerably as a result of the economic downturn, the factors that led to this growth remain in place and long-term it is expected that population and employment in the City of Winslow will continue to grow.

This Plan was funded by the Arizona Department of Transportation (ADOT) Multimodal Planning Division’s Planning Assistance for Rural Areas (PARA) program. The PARA program is funded through the Federal Highway Administration’s State Planning and Research program to non-metropolitan communities for the purpose of conducting transportation planning studies.

Preparation of the Plan involved extensive public outreach, including a stakeholder workshop and two public meetings, along with regular meetings of a Technical Advisory Committee (TAC). The TAC included representatives from the City of Winslow, ADOT, Navajo County, Coconino County, Hopi Tribe, Navajo Nation, and the Northern Arizona Council of Governments.

This is a summary of the recommendations presented in the Plan. For a more detailed discussion of the Plan elements and planning process, please refer to the complete plan document.

2.0 Current Conditions

Key Issues

Several of the key issues that were considered during the development of the Plan are summarized here:

North–South Access

The Burlington Northern Santa Fe Railroad (BNSF) tracks are a barrier that limits interaction to the planned industrial development areas around the Winslow-Lindbergh Regional Airport south of the tracks and the residential and commercial areas to the north of the tracks. Existing access across the BNSF tracks is limited to the SR 87 underpass and the West Winslow Industrial Spur overpass west of town. Improved access across the BNSF tracks is needed to support planned growth and development both around the airport and west of town.

Improved north-south access is also needed from the downtown to the commercial development area along I-40. Berry Avenue, a two-lane road that provides a connection between North Park Drive and Route 66 is the most frequently traveled north-south route. This route passes through an established residential neighborhood and by Washington Elementary School, causing safety concerns among the community.

Economic Development

Retention and expansion of existing businesses and the attraction of new businesses is a key priority for the City of Winslow. East of the downtown has limited economic development opportunities because of floodplain constraints. Because of this, the City has identified areas to the west of the City and



south of I-40 as better suited for economic development. The City is seeking to diversity its economic base south of the railroad tracks and has targeted this area for future employment and housing growth.

Downtown continues to be a focus of redevelopment and revitalization efforts. Another focus of economic development is the area north of I-40 along Mike's Pike between Hipkoe Drive and North Park Drive. Transportation improvements are vital to support both priorities.

3.0 Future Conditions

A medium growth scenario was used to prepare the forecasts of future traffic conditions using the Navajo County Travel Demand Model. This medium growth scenario reflects population and employment growth expected by the City to occur by 2030. It anticipates the addition of new prisons, industrial and commercial growth, and residential growth.

Table E.1. Population and Employment Growth Projections

Category	2006 ¹	2030 ²
Population	10,200	27,600
Employment	5,348	14,537

Notes: 1) Navajo County Travel Demand Model; 2) City of Winslow Medium Growth Projections.

Future Transportation System Conditions

The 2030 Navajo County Travel Demand Model was used to prepare forecasts of future traffic conditions for the City of Winslow. The County model was updated with the City of Winslow population and employment projections to estimate travel demand for the study area. This update included reviewing the forecasts for traffic entering and leaving the model area to ensure that they reflected the projected growth in the Winslow area.

The City of Winslow roads are expected to operate at acceptable levels under 2030 daily traffic conditions. The 2030 traffic forecasts show no capacity deficiencies on the City of Winslow road system. The existing transportation system is adequate to accommodate the projected 2030 population and employment growth. Figure E.1 shows 2030 traffic volume estimates and level of service (LOS) for the study roads.



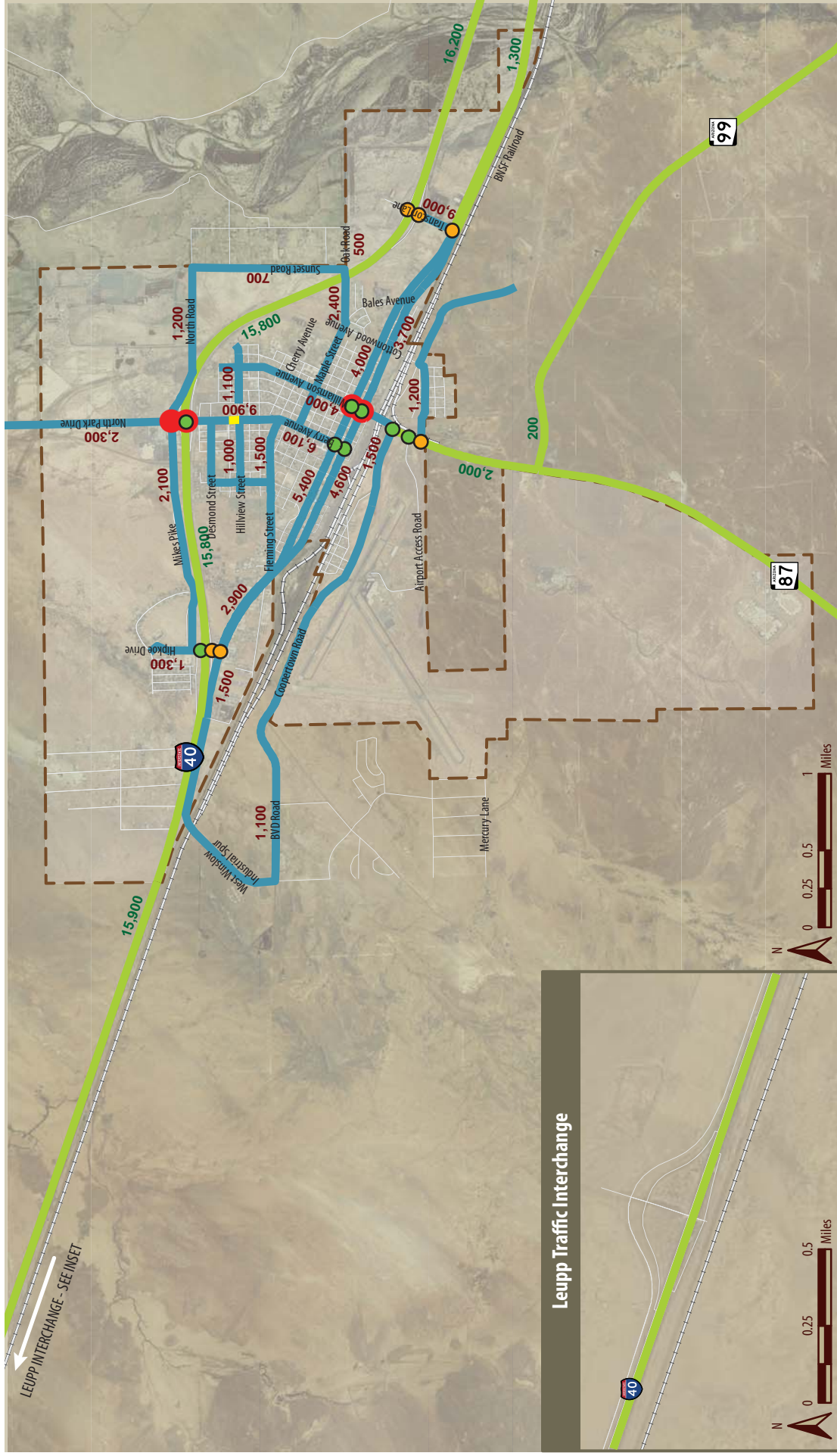


Figure E.1 | 2030 Traffic Conditions - Programmed Improvements
Source: HDR (2011)

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4.0 North–South Railroad Crossings

The BNSF railroad is a transportation corridor that creates a physical barrier for other transportation facilities and thus restricts access – including emergency access – to portions of the study area. A railroad grade separation provides a crossing of the railroad where the roadway crosses over or under the railroad so that there is no conflict between the train and vehicles. A grade-separated crossing provides a safety benefit and reduces delay compared to an at-grade crossing. The BNSF railroad also requires that any new crossing of the tracks be a grade-separated crossing.

The City currently has only two grade-separated crossings of the railroad tracks, one downtown along SR 87/Williamson Avenue and the other to the west of the City limits along West Winslow Industrial Spur/BVD Road. Limited north-south crossings have hobbled economic development south of the tracks and created bottleneck issues during emergencies.

To address these challenges, the Plan identifies five concepts to add new grade separated crossings and improve existing access.

- Coopertown Bypass – West Winslow Industrial Spur
- Old Clear Creek Road – Transcon Lane Connection
- Williamson Avenue Underpass
- New West Winslow I-40 Traffic Interchange
- Leupp Traffic Interchange Improvements

Evaluation Criteria and Environmental Scan

A planning level evaluation was conducted of each concept using six general evaluation criteria. The purpose of this planning level evaluation was to identify potential benefits, impacts, and constraints. More detailed analysis of the criteria would be required during the scoping, concept development, and design phase of a project. The criteria used in the evaluation were cost, emergency and truck access, economic development, system performance, and community support.

A high-level environmental scan was completed for the study area. The environmental scan was developed to identify and describe environmentally sensitive areas that might constitute fatal flaws for potential north-south railroad crossing alternatives. The scan included an analysis of cultural resources, floodplains, biotic communities, and sites with active leaking underground storage tanks.

Recommended Railroad Crossing Priorities

The Plan prioritizes the five north–south railroad crossings as follows:

Highest Priorities

The Coopertown Bypass and the Williamson Avenue Underpass are recommended in the Plan as the City of Winslow’s highest priorities. The Coopertown Bypass would improve truck access and safety by removing trucks and other heavy vehicles from the Coopertown neighborhood.

Widening of the Williamson Avenue Underpass is the City’s preferred solution for improving north-south access across the railroad. BNSF is open to the underpass improvement provided that its design requirements for a shoofly track to detour the mainline during construction are met.



Secondary Priorities

Secondary priorities include the Williamson Avenue Underpass, New West Winslow I-40 Traffic Interchange, and the Leupp Traffic Interchange improvements. A new overpass connecting Transcon Lane to Old Clear Creek Road or SR 99 would be a more cost effective solution for meeting the City's goals of improving north-south access compared to the Williamson Avenue Underpass. It would create additional redundancy in Winslow's transportation system by providing a third point of access and a direct connection to I-40 at an existing traffic interchange. It would improve emergency access and overall system performance.

Additional access to I-40 west of Winslow would support the City's long term economic development goals west of the airport. A potential new traffic interchange and railroad crossing two miles west of the existing Hipkoe traffic interchange would provide direct access to this growth area. As growth occurs over the long term, a new railroad crossing at the Leupp TI may also be warranted to accommodate increased travel demand.

5.0 Recommended Road Improvements

Improvements have been identified in the Plan that maintain and enhance multimodal mobility and safety. These recommended improvements are primarily based on input and suggestions from the City, stakeholders, and existing plans.

Near-Term Priorities

Near-term priorities are identified in the City of Winslow five-year capital improvement plan and the ADOT five-year work program. Funding had been identified for these improvements and construction is planned. The Coopertown Bypass is considered a high priority and is recommended to be implemented in the near-term. Near-term priority studies include a Transcon Lane Truck Access Study, Route 66 Corridor/Access Study, East End Railroad Crossing Study, and a Hipkoe Drive Traffic Interchange Traffic Operations Study. A new 2-lane road to connect Transcon Lane and Oak Road is also recommended in the near-term and is included in the City's capital improvement program.

Mid-Term Priorities

Mid-term priorities will be added to the City of Winslow's five-year capital improvement program during the next cycle of updates. Mid-term priorities for the City include the Bales Avenue connection, realignment of Airport Road, and safety and operational improvements on key collector roads including Williamson Avenue, North Park Drive, Berry Drive, and Hillview Street. In partnership with the City, it is recommended that ADOT implements improvements to the Transcon Lane Traffic Interchange and the Hipkoe Traffic Interchange.

Long-Term Priorities

Long-term priorities are planned improvements that have not yet been identified for funding, but are next on the priority list. Long-term priorities identified include implementing the recommendations of the East End Railroad Crossing Design Concept Study. This may be a grade-separated railroad crossing at Transcon Lane or a widening of the existing Williamson Avenue underpass. The City should partner with ADOT and land developers to establish new access from I-40 west of Winslow.



Also, as traffic between Winslow and Payson grows, ADOT should evaluate the need for additional passing lanes and shoulder improvements to maintain safe and efficient operations on SR 87.

Figure E.2, Road Improvement Needs, shows the recommended roadway improvements, along with north-south railroad crossings. The Plan includes costs for these improvements. The construction of these improvements depends on future population and employment growth, funding, and environmental and engineering studies.



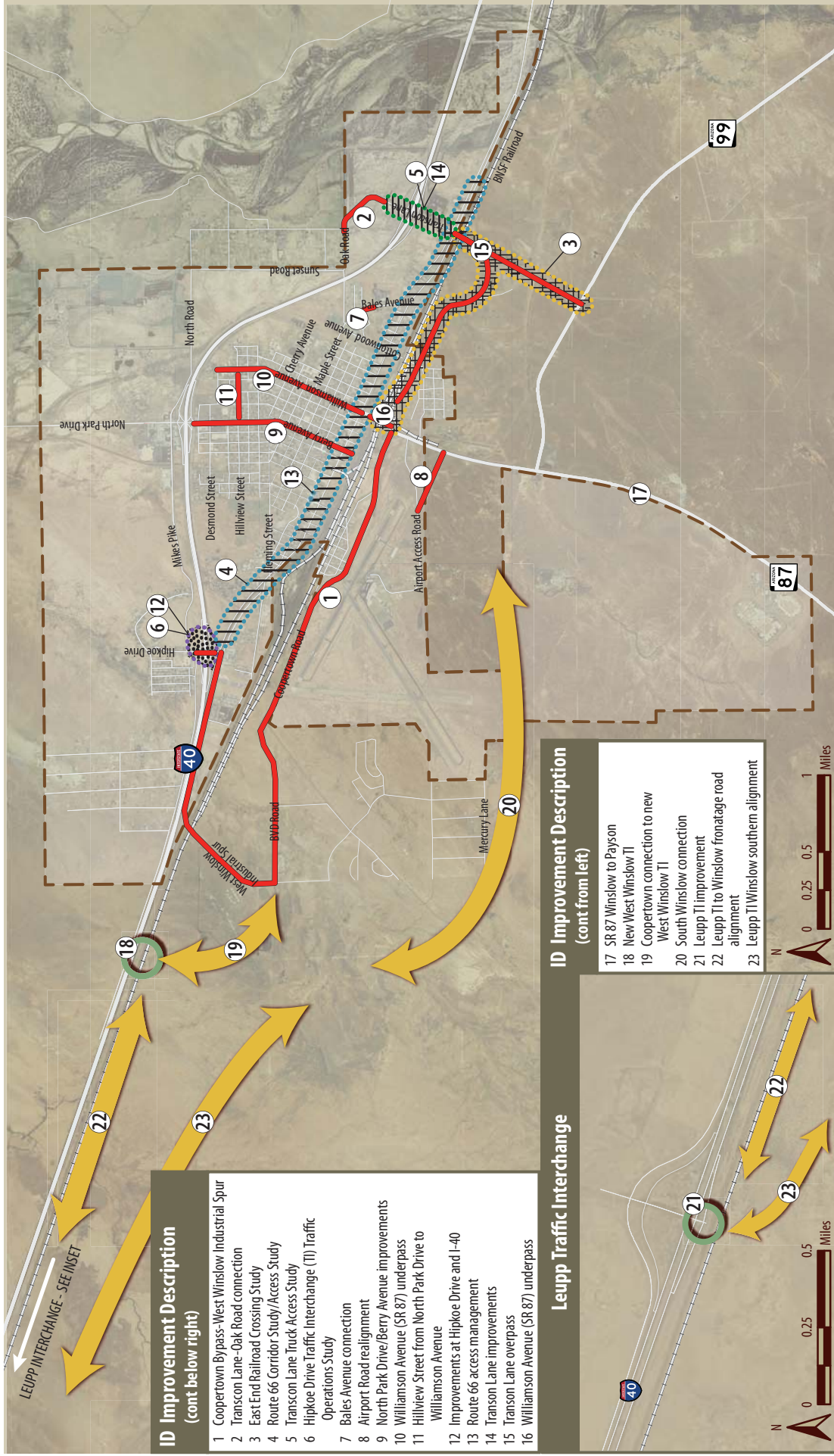


Figure E.2 | Road Improvement Needs
Source: City of Winslow (2007), HDR (2011)

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6.0 Recommended Non-Motorized Improvements

Walking, bicycling, and transit are an important part of the Winslow transportation system. The 2008 ADOT Arizona Rural Transit Needs Study shows that Winslow has a significant population that could benefit from a multimodal transportation system.

Public Transit

There is a growing unmet demand for transit services within the City of Winslow. The Plan recommends a transit service to meet this growing need such as a demand responsive service that operates a limited number of subscription services like scheduled daily or weekly trips to and from a community/senior center or to a local destination such as a supermarket or Walmart.

The Plan also recommends that the City of Winslow participates in, and implements the recommendations of, a regional transit feasibility study that examines the potential for connections between Winslow and Holbrook and Winslow and Flagstaff. The opening of the new Navajo Nation Casino at Twin Arrows in 2013 would create a new activity center that might improve the feasibility of new regional service.

Non-Motorized Trail System

Several near-term sidewalk improvements have been identified in the City's capital improvement program. In addition to maintaining its existing sidewalks, the Plan recommends the City implement the proposed trails and paths identified in Figure E.3.

Near-Term Priorities

Near-term priorities include sidewalk improvements on existing neighborhoods. The proposed historic and heritage destination trail identified in the City of Winslow General Plan for Coopertown Road should be implemented together with the Coopertown Bypass project. The City should begin planning studies for a new west end pedestrian bridge across the BNSF tracks to improve pedestrian mobility between the Hopi Tribe residential area on the West Winslow Industrial Spur and activity centers, such as the Indian Health Care Center, in central Winslow.

Mid-Term Priorities

In the mid-term, the City should implement the west end pedestrian bridge across the BNSF. The proposed historic and heritage destination trail to the airport identified in the City of Winslow General Plan should be implemented together with the relocation of Airport Road.

Long-Term Priorities

Over the long-term, the City should complete the implementation of the trails and paths shown in Figure E.3. The east end railroad crossing improvements will provide new pedestrian access across the BNSF tracks.



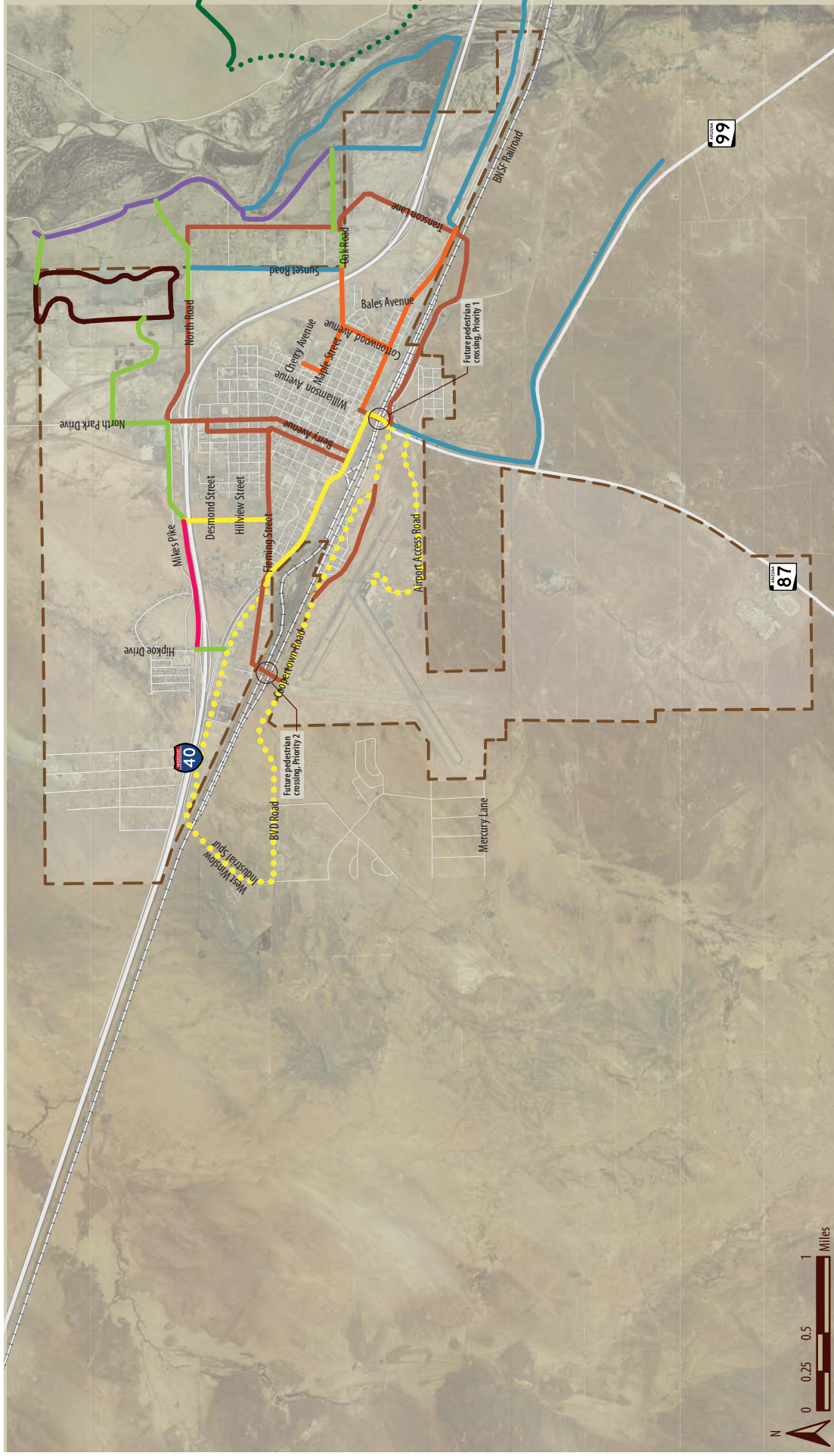


Figure E.3 | City of Winslow Trails and Paths System
Source: ALRS (2009), HDR (2011)

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7.0 Funding, Policies, and Guidelines

The Plan includes policies and guidelines needed to help implement the recommendations of this transportation plan, along with potential funding mechanisms.

Typical Road Cross Sections

Recommended road cross sections for the City were developed based on local conditions and preferences, emergency vehicle access requirements, cross section standards for other Arizona cities, and other sources. The Plan identifies typical road cross sections that include sidewalks and multi-use trails to support the recommended path and trail system.

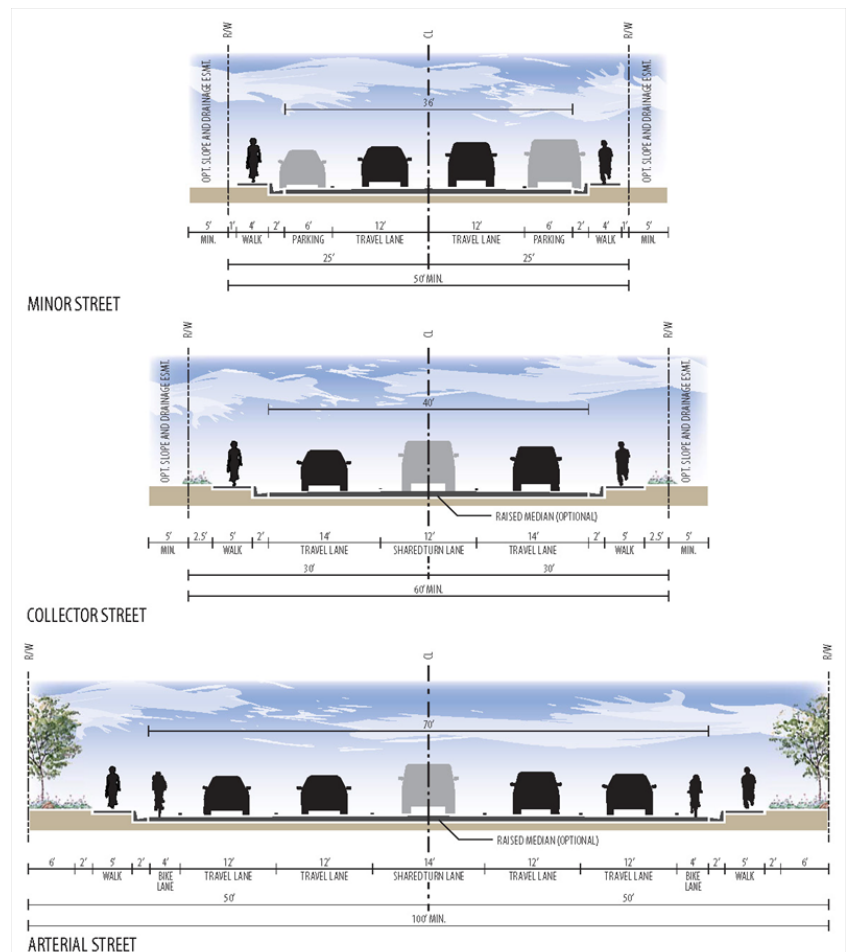
Access Management

Access management is the systematic control, location, spacing, design, and operation of driveways and street connections, medians, median openings, turn lanes, traffic signals, and interchanges. The purpose is to provide (or improve upon the existing) access to land development while at the same time preserving the constant flow of traffic on surrounding roads, keeping crucial factors such as speed, safety and capacity needs in mind.

The City of Winslow does not have access management plans or policies in place. An access management plan for Route 66 within the City limits was recommended in the 2010 Navajo County Central Regional Transportation Study. The Plan outlines the purposes of access management and recommends the City consider developing a comprehensive access management plan.

Transportation Funding

In the current fiscal environment, the funding of significant transportation projects is complex and, in most cases, requires multiple sources. In addition, transportation funding is dynamic and there is a need to continuously monitor the existing sources and new sources that may become available as state and federal legislation changes. Innovation has become the mainstay of successful transportation funding. The Plan has identified and summarized a number of existing and potential revenue sources for the City to consider in continuing to address its transportation needs.



The above image shows typical street sections for Minor streets, Collector streets, and Arterial streets.

8.0 Conclusion

The need for new facilities is predicated on the growth that is occurring within the City of Winslow, the surrounding area, and the region as a whole. The factors that make the City of Winslow a desirable place to live remain in place, and long-term it is expected that population and employment in the City of Winslow and the region will continue to grow. By taking the recommendations as outlined in the Plan, the City of Winslow will be prepared to meet the multimodal transportation demands of the next generation.

