7. CIRCULATION ELEMENT

The General Plan's Circulation Element examines transportation networks within the city and in adjacent areas and establishes policies intended to help accomplish local objectives related to circulation and transportation. The element provides a conceptual framework to meet the projected transportation needs of the community; and a Street Classification Map that describes existing streets and indicates, in general, future corridors contemplated by other plans prepared by regional groups and the Arizona Department of Transportation (ADOT). It also includes discussion of the key issues facing the community, goals and objectives and an Action Plan with proposed projects designed to improve circulation in the community. Related goals and objectives act as guidelines for City Staff, the Planning and Zoning Commission and City Council when programming improvements to the city circulation system.

A. VISION AND FOCUS

The City of Cottonwood desires a safe and efficient circulation system for autos, transit, bicycles and pedestrians. The system, developed in partnership with the Arizona Department of Transportation (ADOT), Yavapai County and the Town of Clarkdale, must meet the needs of local residents, visitors and regional traffic, much of which is attracted to commercial, medical and community facilities in Cottonwood. As demonstrated by Section 4, "Community Vision," Cottonwood's General Plan seeks to strike a balance between the needs of economic development and preserving its small town qualities. The following are the basic focal points of the Circulation Element in providing this balance:

1. Addressing Traffic Safety and Congestion

Cottonwood, as the regional market center, experiences high traffic volumes for a community of its size, a situation which is adding to concerns regarding safety and congestion. The Circulation Element establishes means for mitigating traffic impacts by offloading high traffic areas wherever possible, identifying and resolving traffic safety issues, implementing "traffic calming" measures, encouraging transportation alternatives and the development of alternative transportation, such as transit, pedestrians and bicycle use.

2. Enabling Economic Development and Prosperity

The community desires a level of economic development, prosperity and amenities afforded by larger urban areas. The Circulation Element provides for the development of streets and other transportation modes and corridors essential to the accommodation of traffic and infrastructure which supports commerce and industry. The element also establishes means for relieving congestion within these areas wherever possible.

3. Enhancing Streetscapes and the Public Realm

Public rights-of-way which enclose Cottonwood's streets and drainage corridors constitute much of the City's "public domain." The Circulation Element encourages the development of these inter-connective corridors as enjoyable points of community interaction and opportunities to make better use of parks and other public areas. In doing so, these corridors will become more attractive to pedestrians and bicyclists, providing some reduction in automotive traffic, as well as added recreational opportunities for the community.

B. RELATED LEGISLATION AND STUDIES

Arizona Revised Statutes (ARS §9-461.05.C.2) requires that the General Plan provide a circulation element consisting of the general location and extent of existing and proposed freeways, arterials and collector streets, bicycle routes and any other modes of transportation as may be appropriate, all correlated with the land use element of the plan. The element is based on the 1995 General Plan's Circulation Element as well as several transportation studies completed in recent years, including the following:

- Cottonwood Area Transportation Plan Final Report (BRW, December/2002).
- State Route 260 Access Management Plan Final Report (HDR, November/2001).
- Airport Master Plan Phase I Report (Coffman Associates, December/2001).
- Verde Valley Transit Study Final Report (Lima & Assoc., April/2000).
- Verde Valley Regional Transportation Study Update Draft Final Report (Lima& Assoc., May/1999).

COTTONWOOD'S TRAFFIC STUDY

A City-wide traffic study was initiated in 1998 by the City of Cottonwood, in association with BRW, Inc., the Arizona Department of Transportation (ADOT), the Town of Clarkdale and Yavapai County. The purpose of the Cottonwood Area Transportation Study is to develop a comprehensive plan to guide the development of a multi-modal transportation system to the year 2018. The study area includes all of Cottonwood and Clarkdale, as well as the adjacent unincorporated communities of Verde Village and Bridgeport. The work program for this study involved the development of:

- A 5-year improvement program (2001-2005);
- A 10-year action plan (2010);
- A long-range transportation plan (2020).

Throughout the preparation of the study, BRW's work was directed by a Technical Advisory Committee, with representatives of Cottonwood, Clarkdale, ADOT, Yavapai County and the Northern Arizona Council of Governments (NACOG).

In order to accurately forecast future transportation needs and prepare a long range transportation plan for Cottonwood, the following were examined:

- Multi-Modal Transport System
- Classification of existing roadways
- Current traffic counts
- Traffic Forecasts
- Traffic carrying capabilities of streets
- Roadway deficiencies
- Planned Improvements
- Financial Capability

TRAFFIC MITIGATION TECHNIQUES

There are some primary means by which traffic impacts are most often addressed. They generally include:

- Comprehensive planning at both the local and regional level.
- Small area planning of neighborhoods and high traffic zones.
- Focusing development to consolidate impacts and reduce infrastructure.
- Development of alternative access points and corridors to offload the most congested areas.
- Separation of traffic types (large vehicles).
- Instituting "traffic calming" techniques, such as narrowing streets and turning radii, placement of houses closer to the street, shorter block lengths.
- Access management, restricting the development of access points, driveways and intersections.
- Traffic signalization and timing of traffic signals so that traffic is moved most efficiently
- Development of alternative transportation such as transit (buses), bicycles and walking.

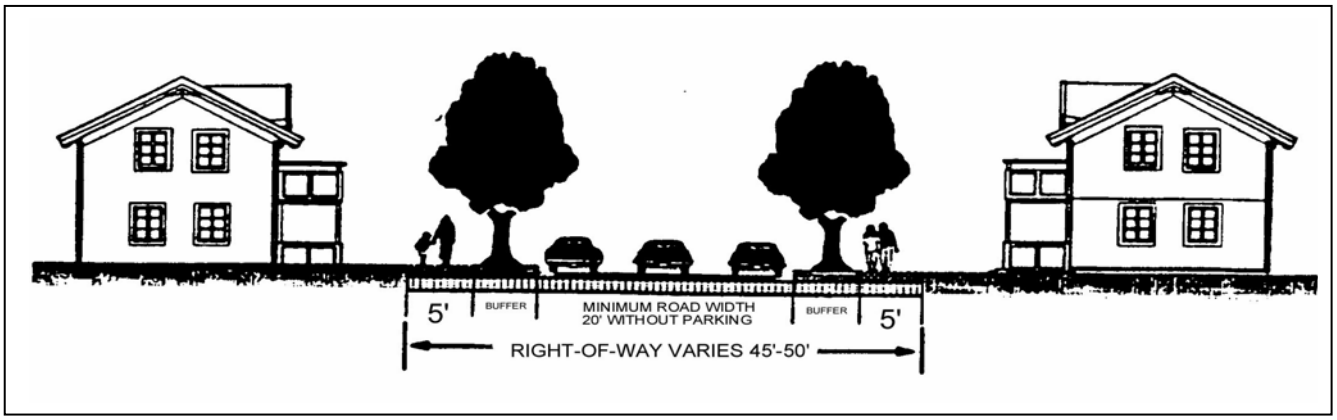


Fig. 7-1: Example of a streetscape design proposed by Cottonwood's Subdivision Regulations.

MEASURING ROADWAY SERVICE LEVELS

Traffic planning involves a careful analysis of roadway types and the preferred "levels of service (LOS)" associated with each. The following sections help to define the methodologies and standards utilized in the analysis of transportation network performance, including roadway level of service and the preferred levels and standards for arterials, collectors and local streets.

The LOS concept is widely used and provides a common and consistent means of evaluating the need for roadway improvements. Performance grades are measured as levels A though F, with A representing the best and F the worst level of congestion or driver discomfort. Most jurisdictions strive to maintain a level of D or better on all roadways. Roads with lower LOS are generally considered congested and may warrant upgrades. Definition of levels are as follows:

Level of Service A: Free-flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations

are constrained only by the geometric features of the highway and driver preferences.

Level of Service B: Indicative of free flow, but the presence of other vehicles begins to have a noticeable impact on speeds and freedom to maneuver.

Level of Service C: Represents a range in which the influence of traffic density on operations becomes significant. The ability to maneuver within the traffic stream, and to select an operating speed, is now clearly affected by the presence of other vehicles.

Level of Service D: Borders on unstable flow. Speeds and ability to maneuver are severely restricted because of traffic congestion.

Level of service E: Operations at or near capacity and quite unstable.

Level of Service F: Forced or breakdown flow.

STREET CLAFFICICATION

Road segments are analyzed based on the number of lanes, the functional classification of the roadway, the maximum desired level of service capacity, roadway geometrics and existing or forecasted average daily traffic volume (ADT). The actual functional capacity of roadway facilities varies by the characteristics of each facility. Typically the performance and LOS of a roadway segment are based on the ability of arterial intersections to accommodate peak hour volumes. Special designs of intersections to achieve acceptable levels of service and lower levels of approach delay could result in higher capacities. LOS D is considered acceptable for arterials and collectors under daily operating conditions.

For segment capacity analysis, all major Cottonwood roadways considered by the Cottonwood Traffic Study were reviewed to determine if the segment operates under or over the recommend LOS C goal under existing conditions. Daily roadway levels of service were determined by comparing the existing or forecast ADT volumes and functional classifications.

Major roadways in the Cottonwood study area have been categorized in the following classifications:

- Minor Arterial (four-lane):
- Minor Arterial (two-lane)
- Collector

Arterial streets are the major arteries carrying traffic across the study area and the region. The primary function is to carry through traffic, with a secondary function of providing access to adjacent land uses. Collector streets are designed to carry lower traffic volumes for shorter distances. Collectors receive traffic from local streets and distribute it to arterials, and vice versa. They serve more of a land access function as opposed to providing mobility for long distance through travel. Because movement along these corridors is slowed as new access points are developed, the location of new driveways is often regulated by access management planning.

TRIP GENERATION

Trip Generation refers to activities that create a vehicle trip. These can include employment (generating trips from a residence to a place of work) services (trips from a residence or place of work to an office, retail area or service center) and recreation. Morning and evening traffic peaks are generally the result of employment and school related vehicle trips.

Revenues that the city applies to street improvements are generated through the gasoline tax paid at the pump, the Highway Users Revenue Fund (HURF). There is a substantial shortfall between funding available for circulation improvements and projected costs

ROADWAY CAPACITIES

Roadway capacity deficiencies begin to occur as traffic volumes approach the design capacity of a roadway. System deficiencies refer to deficiencies which impact system wide continuity and traffic. While the capacity deficiency refers to the volume of traffic compared to the roadway capacity, a system

deficiency refers to the ease of movement between two points. Examples of current system deficiencies due to interruptions in continuity or inability of traffic to flow smoothly include:

- East - West movement across the Verde River
- Lack of street continuity in Verde Village negatively impacts city circulation
- Frequent and undefined access driveways along U.S. 89A and Main Street
- Absence of road shoulders and sidewalk facilities to support alternative modes such as bicycling and pedestrian movement throughout most of the system.
- Heavy reliance on the trunk highway system for internal trips.

C. REGIONAL SETTING

The City of Cottonwood is located at the intersection of State Route SR 260 and Highway 89A in eastern Yavapai County, Arizona. From its terminus in Cottonwood, SR 260 heads southeast about 15 miles to I-17 in Camp Verde, and on to the Mogollon Rim country and the White Mountains communities. Scenic Hwy 89A connects the Prescott area with Jerome, Cottonwood, Sedona, Oak Creek Canyon and Flagstaff. Access to the Phoenix metropolitan region is from SR 260 and I-17, about 100 miles to the south.

REGIONAL PLANNING

Regional traffic planning is very significant to the City of Cottonwood because most local traffic is generated outside the City. The Arizona Department of Transportation administers traffic planning and improvements for Arizona's freeways and other highways. Obviously, these routes carry the bulk of regional traffic in the Verde Valley and within the City of Cottonwood itself. Therefore much of the City's traffic impact must be managed in cooperation with ADOT. ADOT has begun access management plans for SR 260 and SR 89A.

The Verde Valley Transportation Planning Organization (VVTPO) is a committee of local officials which represent Verde Valley communities in the review of regional traffic improvements.

The Verde Valley Regional Transportation Study was completed in 1999 by Lima & Associates as part of a cooperative effort between Yavapai County and the Verde Valley communities. The report predicts the regional population will nearly double during the 20 year course of the study. A transit study was also completed in 2001.

Fig: 7-2

D. LOCAL OVERVIEW

Cottonwood is located at the crossroads of two major highways, State Route 260, and US Highway 89A. Recorded average daily traffic on Cottonwood's arterial streets ranges from a high of 25,500 on SR 260 to a low of 3,700 on Main Street north of Old Town. Recorded collector street traffic ranges from 300 to 6,500 ADTs. Following is a summary of those corridors:

ARTERIALS

Cottonwood is presently served by two arterials, U.S. Highway 89A, a north/south highway which connects Prescott to Flagstaff via Jerome and Sedona and State Route 260 which provides a connection to Interstate 17 (I-17) to the east. These arterials carry the highest volume of traffic at the highest local speeds. As these roads enter the city, they cease to function as pure arterials and distribute local employment, shopping and residential trips.

The intersections of SR 89A / Main Street and SR 89A / SR 260 handle the largest daily traffic volume in Cottonwood. Signalization occurs along both (principal arterial) highways as they pass through Cottonwood. This signalization increases these roads efficiency in distributing internalized, local traffic.

COLLECTORS

The following streets are currently classified as collectors within or adjacent to the City of Cottonwood:

- Main Street(North of 89A)
- Mingus Avenue
- Cornville Road
- 6th Street (Mingus Ave. to Fir)
- 10th St. (Main St. to Dead Horse Ranch St. Pk..)
- 12th Street (Main St to Fir)
- Mingus Avenue
- Black Hills Drive
- Camino Real (Sr 89A to Rio Mesa Trail)
- Del Rio Dr./ Western Drive loop (east of SR 260)
- Fir Street (SR 260 to Monte Tesoro)
- Peila Avenue
- Rio Mesa Trail (SR 89A to Contention Lane)
- Willard Street (SR 89A to Main Street)

The reason certain County streets are included is because these roads also function in service to Cottonwood traffic, regardless that all or portion of those roadways may be outside the City.

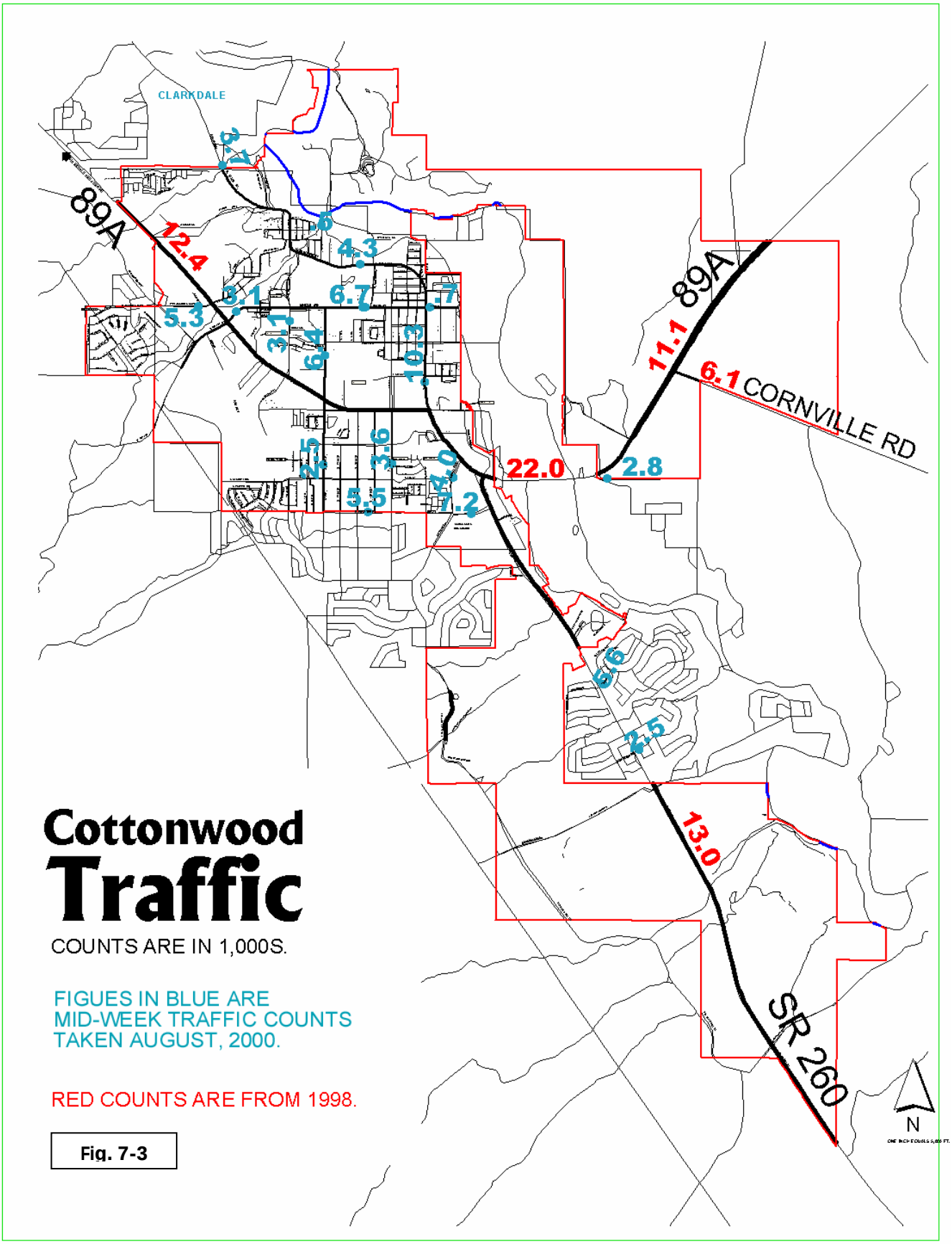

CLARKDALE
89A
12.4
5.3
3.1
6.7
4.3
6
1.2
3.1
6.4
10.3
.7
11.1
89A
6.1 CORNVILLE RD
22.0
2.8
2.5
3.6
5.5
14.0
7.2
6.6
2.5
13.0
SR 260
N
Cottonwood
Traffic
COUNTS ARE IN 1,000S.
FIGUES IN BLUE ARE
MID-WEEK TRAFFIC COUNTS
TAKEN AUGUST, 2000.
RED COUNTS ARE FROM 1998.

Fig. 7-3

CURRENT TRAFFIC AND ROADWAY CAPACITY DEFICIENCIES

The Cottonwood Area Traffic Study (BRW, December/2002) establishes growth forecasts and traffic improvements over four time intervals through the year 2020. Based on an analysis of current traffic loads and roadway conditions, the Cottonwood Area Traffic Study suggests the following current deficiencies in local traffic movement:

- Main Street between SR 260 and the SR 89A by-pass currently experiences a level of service rated between E and F during peak use hours.
- The signalized intersections along US 89A at both the Main Street and the SR 260 intersections experience particularly high turning volumes, which further reduces the LOS associated with this route.
- The SR 260 intersection experiences an F level of service for vehicles turning right from Main Street onto SR 260.
- The 12th Street intersection along US 89A is also rated at an E level of service during peak hours of the day.

FUTURE TRAFFIC AND ROADWAY CAPACITY DEFICIENCIES

Recent traffic studies suggest that, if no traffic improvements are made, traffic is expected to increase to anywhere between 44,000 and 55,000 (+50%-80%) trips per day along SR 89A between its intersections at SR 260 and at South Main Street.

Further south, SR 260 would experience over 40,000 cars per day near the Western Drive and Del Rio Drive intersections.

Traffic along various segments of US 89A (inside and outside the city) will nearly triple during peak flows, resulting in counts which exceed 30,000 ADTs.

Traffic is also expected to double along the interior traffic collectors; triple along Main Street near the Mingus Avenue intersection (to over 27,000 ADTs); and quadruple in Old Town (to over 17,000 ADTs) by 2018. Part of the projected increase along North Main Street is related to the eventual construction of the Phelps Dodge residential project in Clarkdale; and the Mingus Avenue Extension to Cornville Road, that will also help to alleviate some traffic from the SR 260 / US 89A intersection.

The number of deficient traffic corridors (daily LOS of E or F) is projected to increase significantly between 2008 and 2018. US 89A, SR 260 and Main Street account for most of these segments.

Maps on the following pages demonstrate the exact locations of forecasted congestion and failing service levels. In addition charts which follow isolate primary traffic deficiencies throughout the City and suggest improvement measures.

FUTURE NETWORK ALTERNATIVES

To develop socioeconomic projections and forecast traffic volumes, BRW modified and refined a TRANPLAN model originally developed for the 1999 *Verde Valley Regional Transportation Study Update*. TRANPLAN is a widely accepted transportation forecasting microcomputer program that estimates the traffic volumes on a street network based on socioeconomic conditions such as population and employment, and on the characteristics of the streets. The TRANPLAN model and updated socioeconomic projections for the Cottonwood area were used to analyze the following future network alternatives:

2005 ROADWAY NETWORK

Incorporating existing facilities plus committed improvements for the 1999-2005 period. The Mingus Avenue extension from Main Street to Cornville Road is not included in the 2005 network, since its completion by that date is not assured.

2010 NETWORK

Incorporating all 2005 facilities plus committed improvements for the 2004-2005 period. The Mingus Avenue extension is included. In addition, it was assumed that ADOT will widen SR 260 to four lanes from Western Avenue to the south study area boundary by 2010. *However, this improvement is still not part of ADOT's 5-Year Plan. The project has been delayed indefinitely in view of budget cutbacks and the possible construction of a bypass connection to SR 89A further south along SR 260.*

YEAR 2020 BASE NETWORK

Identical to the 2010 network but modeled with 2020 socioeconomic projections.

YEAR 2020 ALTERNATIVE 1

This alternative adds (to the Base network) an extension of Willard Street south from SR 89A to Mesquite Drive/Monte Tesoro Drive.

YEAR 2020 ALTERNATIVE 2

This alternative consists of the Base network plus a new West Bypass route that would be constructed in phases from SR 89A in Clarkdale (west of the Cement Plant Road intersection) to SR 260 in the general vicinity of Ogden Ranch Road. The new route would be designed to divert traffic from the most congested portions of SR 89A and SR 260 through the urbanized area. The West bypass and Willard Street alternatives, is expected to mitigate more of the 2020 base network deficiencies than Alternative 1, the Willard Street extension. However, it is unclear whether roadway widening or construction of the West bypass (Alternative 2) would provide relief adequate to justify its construction.

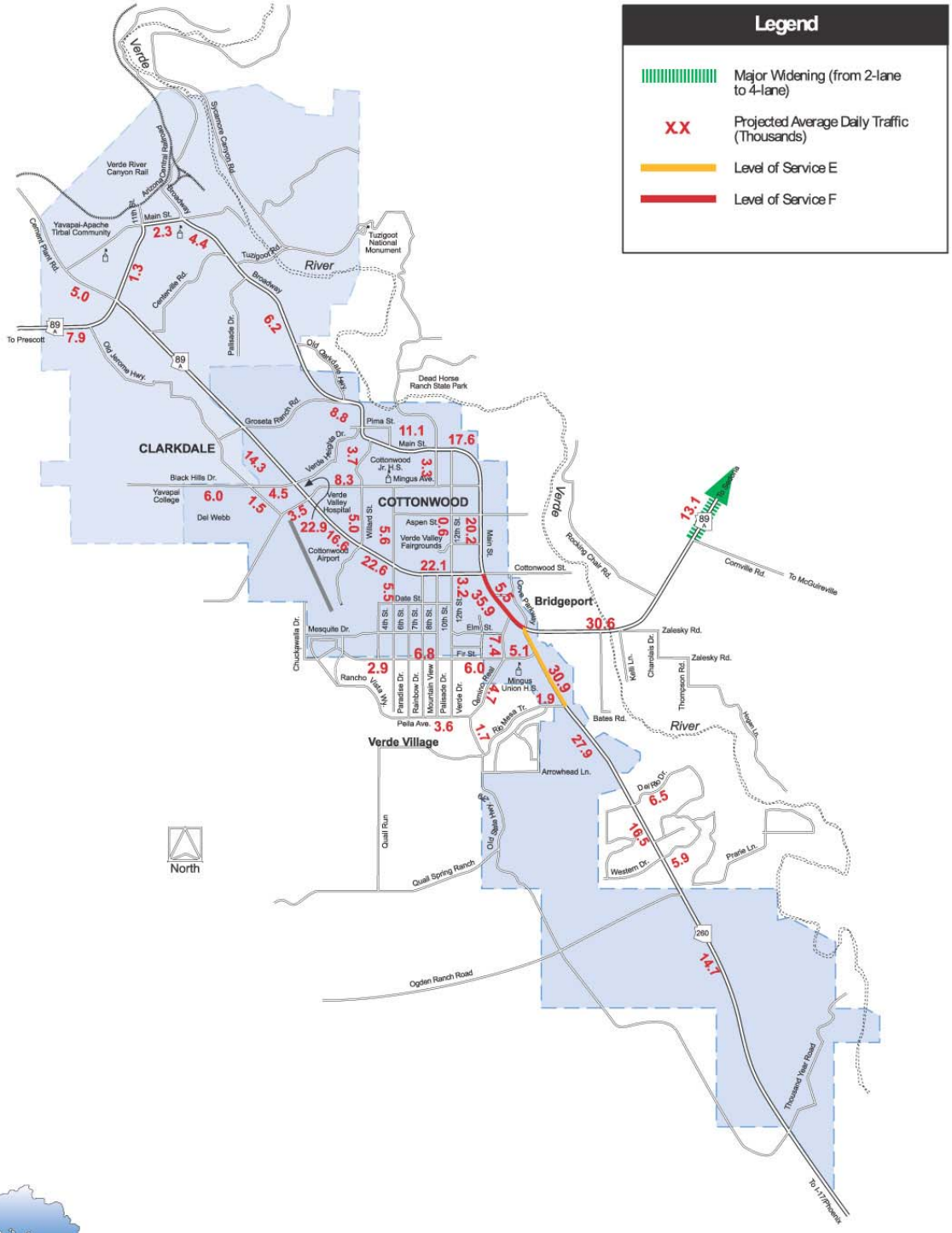
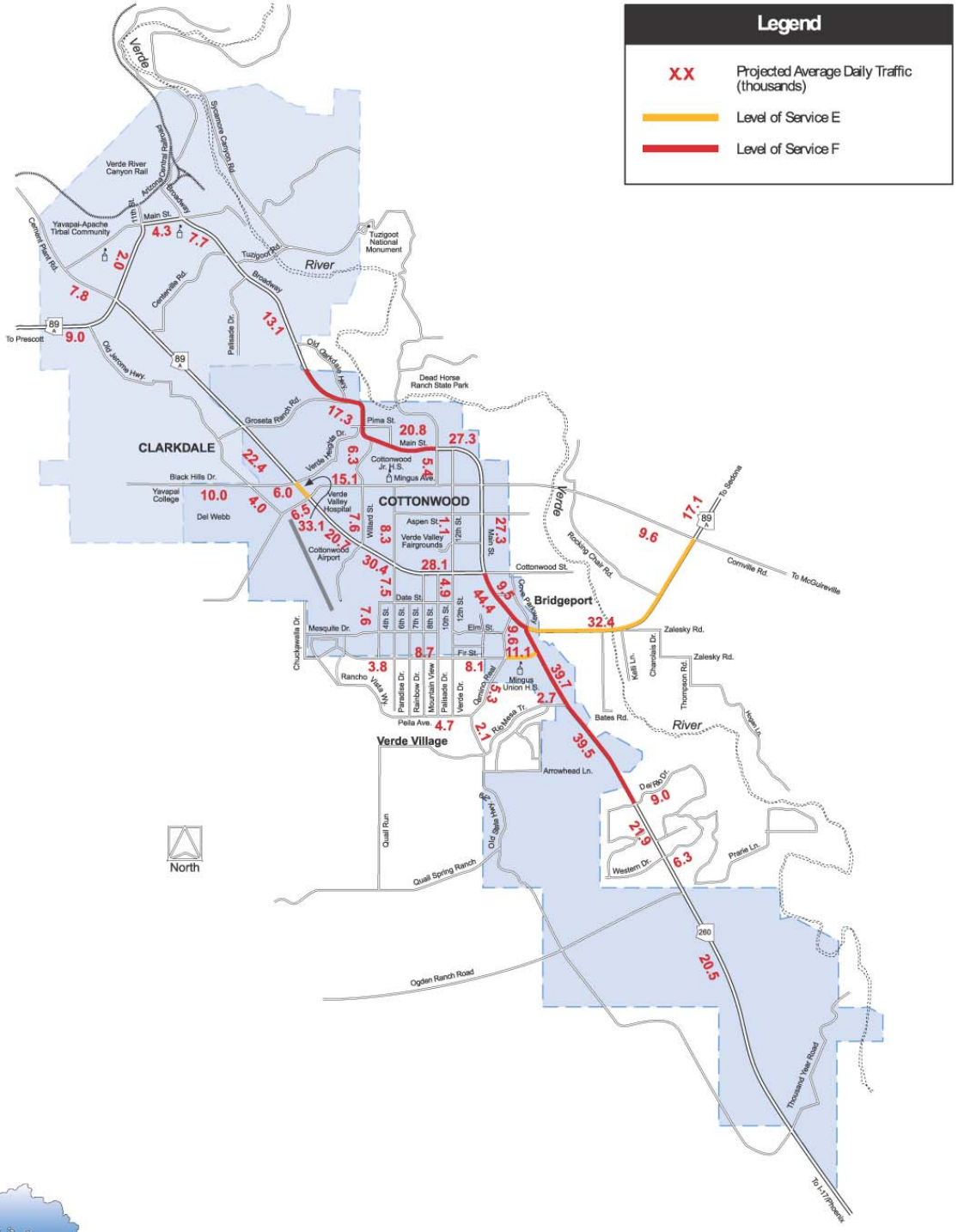


Fig. 7-4
Year 2005 Network

Cottonwood Area Transportation Plan

BRW A DAMES & MOORE GROUP COMPANY



Cottonwood Area Transportation Plan

Fig. 7-5

Year 2020 Base Network

DMG BRW A DAMES & MOORE GROUP COMPANY

GENERAL SUMMARY OF PRIMARY IMPROVEMENTS

The Cottonwood and Lima traffic studies both suggest a lengthy series of traffic corridor deficiencies and related improvements. The preceding section provides an inventory of those improvements as well as a phased approach to implementation. One of the functions of the General Plan is to enable a process for continued prioritization over time, based in part on changes which may occur.

To better coordinate land use planning within and around the City, the General Plan provides a Street Classification system which demonstrates the major traffic corridors, the intended conveyance of traffic through the City, as well as traffic improvements to mitigate related impacts. In establishing this system, it is important to emphasize that flexibility is the key to maintaining a successful traffic system. Although several new routes have been proposed in order to relieve traffic at certain areas o the City, many of these routes are merely suggested in concept at this point. Design standards for the various corridor classifications are established by the City subdivision regulations. The following provides a basic description of those corridors:

Minor Arterial:

Generally the State highway sections which traverse the City, including SR 260 (and its potential bypass alternatives) and US 89A. The typical design for this roadway would feature a 110 foot right-of-way, a 74 foot roadway cross-section divided by a raised median, curb and gutter, bicycle lanes and detached sidewalks. All utilities would be contained within the right-of-way.

4-Lane Collector:

The only example is the section of North and South Main Street which extends from North 10th Street south to the US 89A intersection. The proposed Western Loop (to be constructed initially as a 2-lane collector) would also fall into this category once full right-of-way development is accomplished. The design profile features an 80 foot right-of-way, 48 foot roadway width, curb, gutter, bicycle lanes and detached sidewalks. All utilities would be contained within the right-of-way.

2-Lane Collector:

Within the City, this classification includes east-west connections such as Mingus Avenue, Black Hills Drive, Elm Street, Fir Street and the proposed Groseta Ranch Road improvements, a future connection between Willard Street and West Mingus Avenue south of the airport, two new routes linking the West Loop to SR 260 south of Verde Village, including improvements to Ogden Ranch Road, and a new route further north that would traverse the State Trust block, also joining with a western extension of Del Rio Drive, and with a new intersection along SR 260 in the vicinity of Godard Road. North-South collectors include Willard Street, South 6th Street, North 10th Street, 12th Street, South 16th Street, Camino Real and Cove Parkway. New routes would also include improvements to the Airport Road / Old Jerome Highway. The design profile features an 80 foot right-of-way width, a 32 foot roadway, curb, gutter, bicycle lanes and a detached sidewalk. All utilities would be contained within the right-of-way.

Local Street:

All other streets would be classified as local streets. The design profile features a 45 foot right-of-way and a minimum 20 foot roadway, in addition to any on-street parking. Sidewalks may be attached or detached. No bicycle lanes would be provided. Utilities, other than sewer, would be accommodated in Public Utility Easements adjacent to the right-of-way.

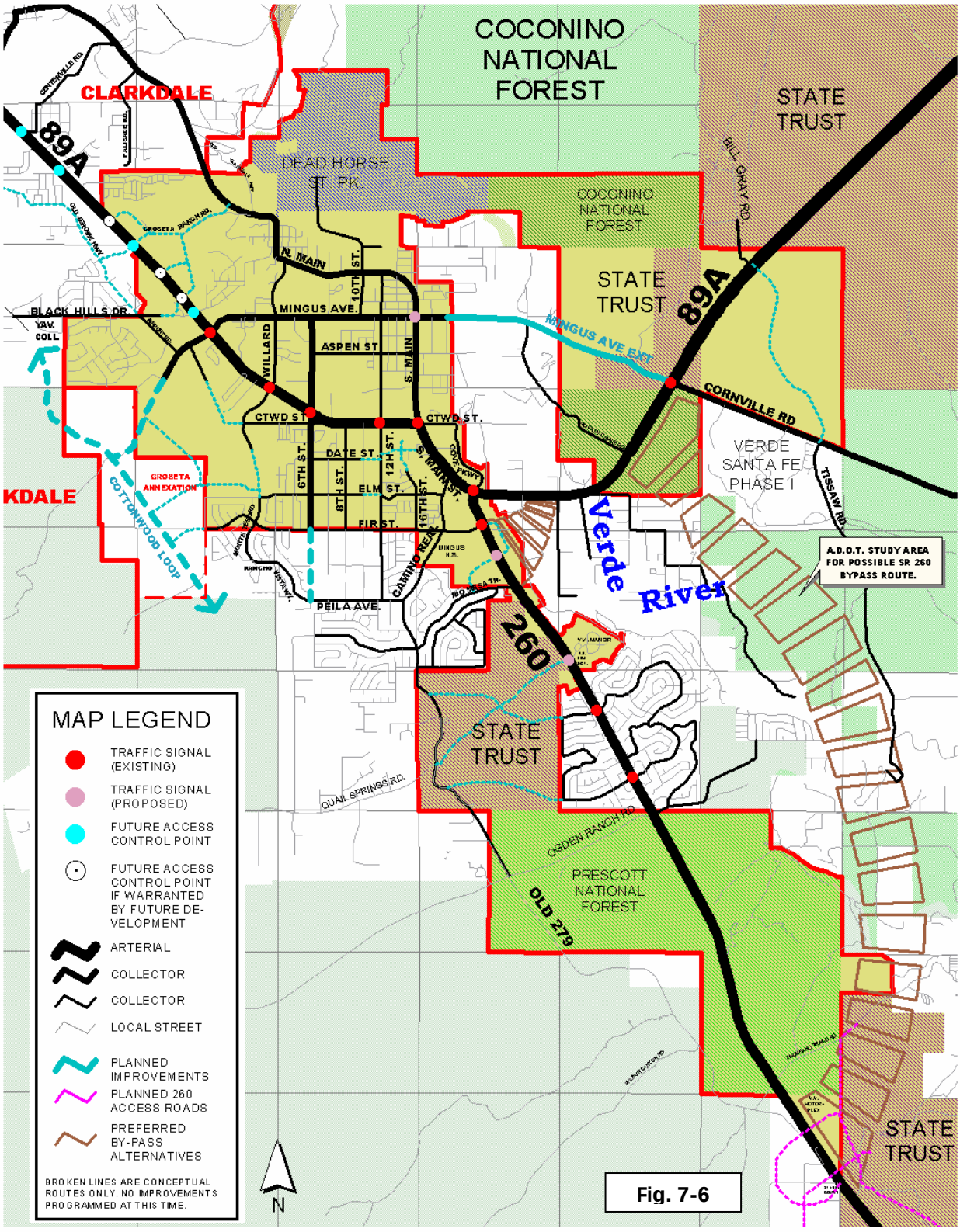
PRIMARY TRAFFIC IMPROVEMENTS

The graphic on the next page describes a series of traffic improvements recommended by the General Plan following the review of local and regional traffic studies. Primary corridor improvements include the Mingus Avenue extension, partial development of the West Loop, and two other improvements intended to offload the SR 260/89A intersection, including an extension of Rio Mesa Trail (east across SR 260

and north to join SR 89A east of the 260 intersection); and ADOT's recently proposed freeway style connection between these two routes, south and east of the City. The bypass corridor representation in Figure 7-6 is intended to reflect the corridor alternative which exists closest to the City, without interrupting open area and separation between Cottonwood and Camp Verde.

Fig. 7-6

STREET CLASSIFICATION AND FUTURE TRAFFIC CORRIDOR CONCEPTS



BY-PASS PROPOSAL

One very important change not considered in either traffic study is the prospect of a major bypass route. The Arizona Department of Transportation recently started an access management study (State Route 260 Access Management Plan Phase 2 by HDR, Inc.) for SR 260 that recommends a bypass route of the most congested portions of US 89A and SR 260. This new route concept is proposed to leave the existing SR 260 corridor in the vicinity of Thousand Trails Road, cross the Verde River with a new bridge, and tie into the existing US 89A corridor in the vicinity of the Mingus Avenue / Cornville Road intersection.

Due to the newness of this concept, it has not been modeled into the traffic study which supports this element, for an evaluation of its impact on the transportation network. It is apparent that it would have a dramatic beneficial effect on the two state highways that are forecasted to have capacity problems. It is equally apparent that there are significant public policy impacts of this concept related to land use, open space and environmental concerns. It is recommended that the City's transportation plan and the 1999 Verde Valley Transportation Plan be updated to model this concept after the conclusion of ADOT's Phase 2 report. Should this concept be pursued by ADOT, the General Plan strongly suggests that both points of connection to the State highway system occur within the corporate limits of Cottonwood to minimize land speculation and sprawl.

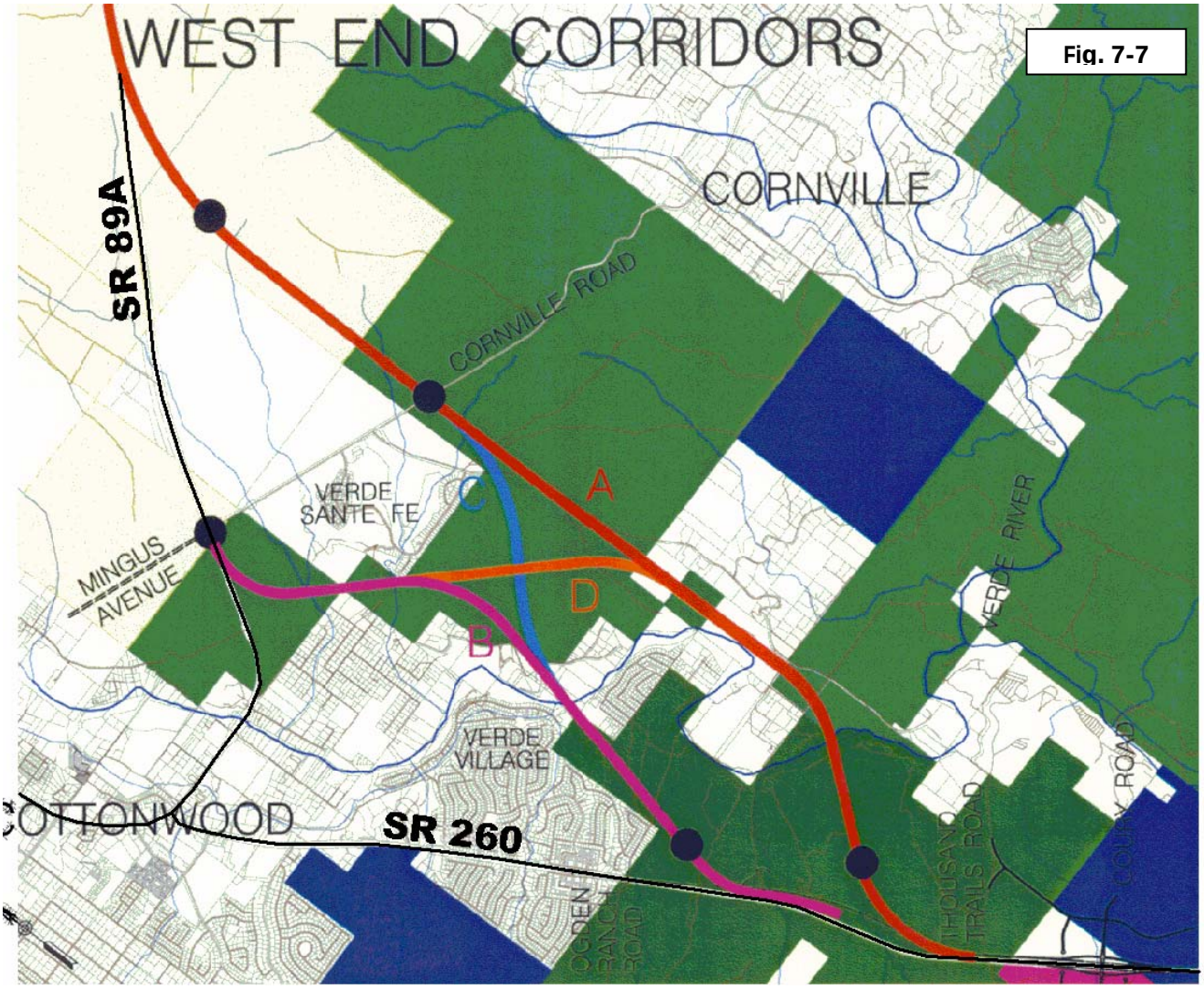


Fig. 7-7: The Arizona Department of Transportation plans to bridge the Verde River with a freeway style bypass connection between SR 89A and SR 260 along one of these corridors within 30 years.

COMPLETED PROJECTS

Since the City's traffic study was initiated in 1998, a number of recommended projects have been completed. They include:

- SR 89A (Cottonwood to Sedona): Major widening to 4-lane divided highway.
- SR 89A (12th Street intersection): Signalization, north and southbound turn lanes.
- SR 89A (West Mingus Avenue intersection): Signalization, east and west turn lanes.
- Fir Street (Camino Real to Monte Tesoro): Reconstructed as a 2-lane collector with curb, gutter sidewalk and bike lanes
- Willard Street (North Main to Mingus): 2-lane urban section and sidewalk. Accomplished with $330,000 in CDBG funding;

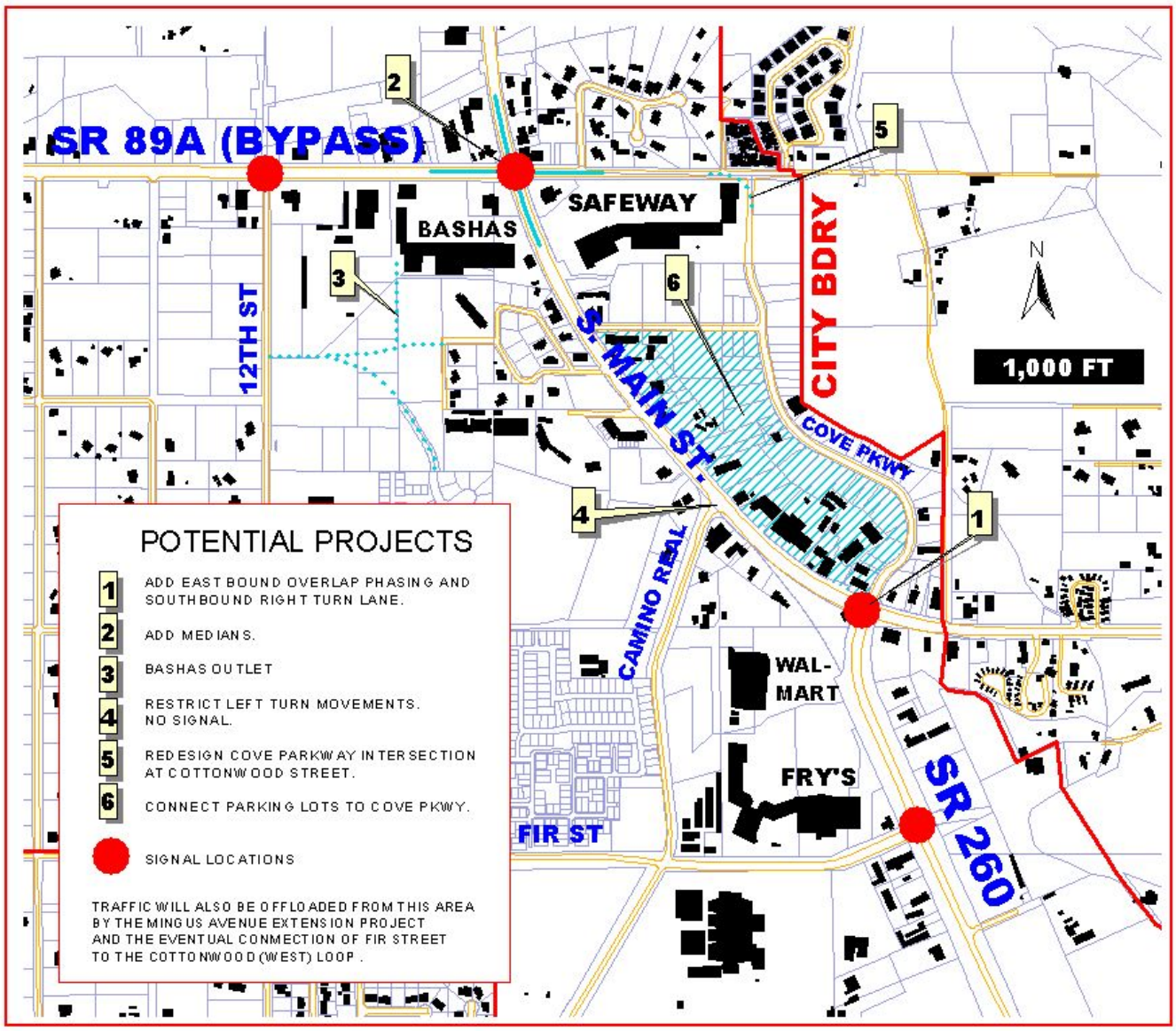


Fig. 7-8: Improvements proposed in order to help alleviate congestion along SR 89A between and adjacent to the intersections at SR 260 and South Main Street.

POSSIBLE TRAFFIC MITIGATION PROJECTS

- **Mingus Avenue Extension:** With Yavapai County, build the Mingus Avenue Extension Project (construction in progress). This will provide another route over the Verde River and allow commuters between Cottonwood and Sedona the ability to avoid congestion along SR 89A between SR 260 and South Main Street.

- **West Loop:** Both traffic studies suggested the development of a "west loop" corridor west of the City as a limited access 2-lane connection between Ogden Ranch Road and US 89A west of the Cement Plant Road intersection. However, it is unknown how the project would be financed. A portion of the loop corridor can be provided in association with private development of the Groseta Ranch property (currently pending annexation). This link would connect the western extensions of Black Hills Drive and Fir Street, providing alternate access to Clarkdale Foothills, Yavapai College and Cottonwood Ranch. Remaining portions of the loop are beyond the current 10-year scope of the General Plan.

- **Fir Street Extension:** Since the completion of the traffic studies, and in the course of developing a Circulation Element for the General Plan, the Planning & Zoning Commission also suggested another bypass alternative that would extend Fir Street east (from its current location along SR 260) and north to the site of a new intersection with SR 89A, east of the 260/89A intersection. The route is recommended as a means to offload the 260 intersection as well as to collect traffic behind new commercial developments east of the Fir Street intersection.

TRAFFIC MITIGATION ALONG SR 89A

- **Widening of West SR 89A:** Widening is expected to begin in 2007 between Black Hills Drive and the Cement Plant Road in Clarkdale.

- **New Traffic Signals:** Traffic signals or roundabouts would be located at Groseta Ranch Road; the Black Hills Drive realignment; and at the Lisa / Lincoln intersection (in Clarkdale); and at the Cement Plan Road / 11th Street intersection.

- **Black Hills Intersection Realignment:** Movement of the Black Hills intersection north to meet with ADOT's spacing requirements for traffic signals.

- **Verde Valley Plaza Access:** In conjunction with property owners, develop a rear access way out of the Verde Valley (Bashas) Shopping Plaza, connecting to an extension of Skyline and Date Streets and on to 12th Street.

- **Medians at the South Main Street Intersection:** Medians may be built within 400 feet of the intersection to control turning movements and improve safety.

- **Camino Real Intersection:** Restrict left turns from Camino Real onto Main Street when needed to ensure that a traffic signal will never meets warrants at this intersection (signalization may add to congestion on Main Street).

- **Cottonwood Street / Cove Parkway Thoroughfare:** Develop a smooth transition and free turning movement from Cottonwood Street to Cove Parkway. Develop Cove parkway as a three lane street as traffic warrants.

- **Main Street Parking Access Via Cove Parkway:** Along with property owners, work to connect Main Street parking lots to Cove Parkway, similar to the Mount Hope Foods example.

- **SR 260 Intersection Improvements:** The Main Street / SR 260 intersection is forecasted to experience a poor peak hour LOS, which will require both geometric and signal phasing improvements. The addition of overlap phasing for eastbound right turns from Main Street to SR 260 (green arrow) could improve intersection operations today. Installation of

a second eastbound right turn lane is also needed however.

COLLECTOR SYSTEM UPGRADES

- **Groseta Ranch Road:** Improvements to Groseta Ranch Road are also suggested between the loop road and North Main Street, near Old Town. It is expected that this project will be financed by private development.

- **West Cottonwood Street:** Extension of West Cottonwood Street to join with Airpark Road completing a continuous link between South 6th Street and West Mingus Avenue.

- **Elm Street:** Completion of the East Elm Street corridor between 10th and 12th Street, completing a circuit between the Willard Extension and Camino Real.

- **Willard Street Laterals:** The southern extension of Willard Street may also set up opportunities for a western extension to West Mingus Ave and to the West Loop.

- **Monte Tesoro / Rancho Vista:** The development of an inner loop via the eventual extension of Willard Street south to Monte Tesoro, Rancho Vista and Peila, ultimately connecting to Camino Real.

- **South 6th Street Extension:** In cooperation with Yavapai County, completion of a new traffic corridor south to Peila Avenue.

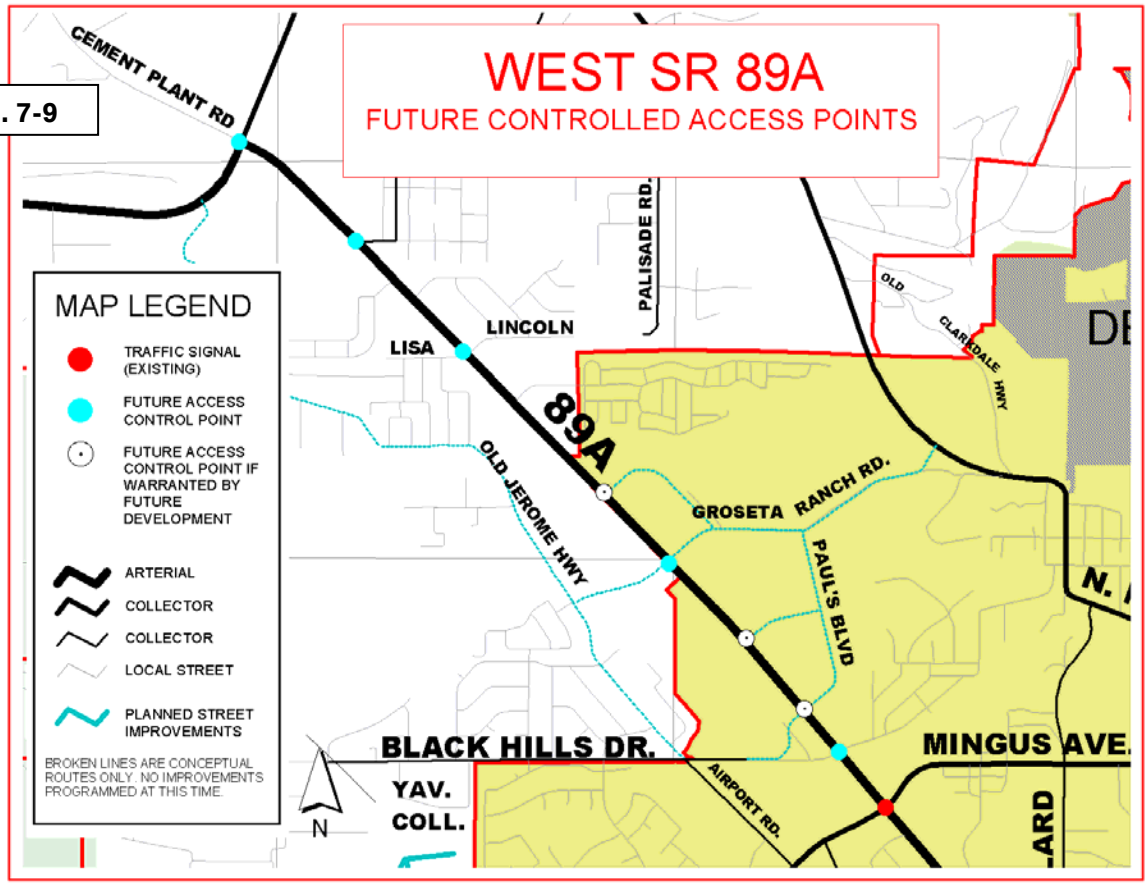
- **Rodeo Drive and Commercial Extension:** Rodeo Drive will be developed as a signalized intersection on SR 260 north of Rio Mesa Trail. The proposed extension to the east would provide a connection to Fir Street and collect commercial traffic much like Cove Parkway.

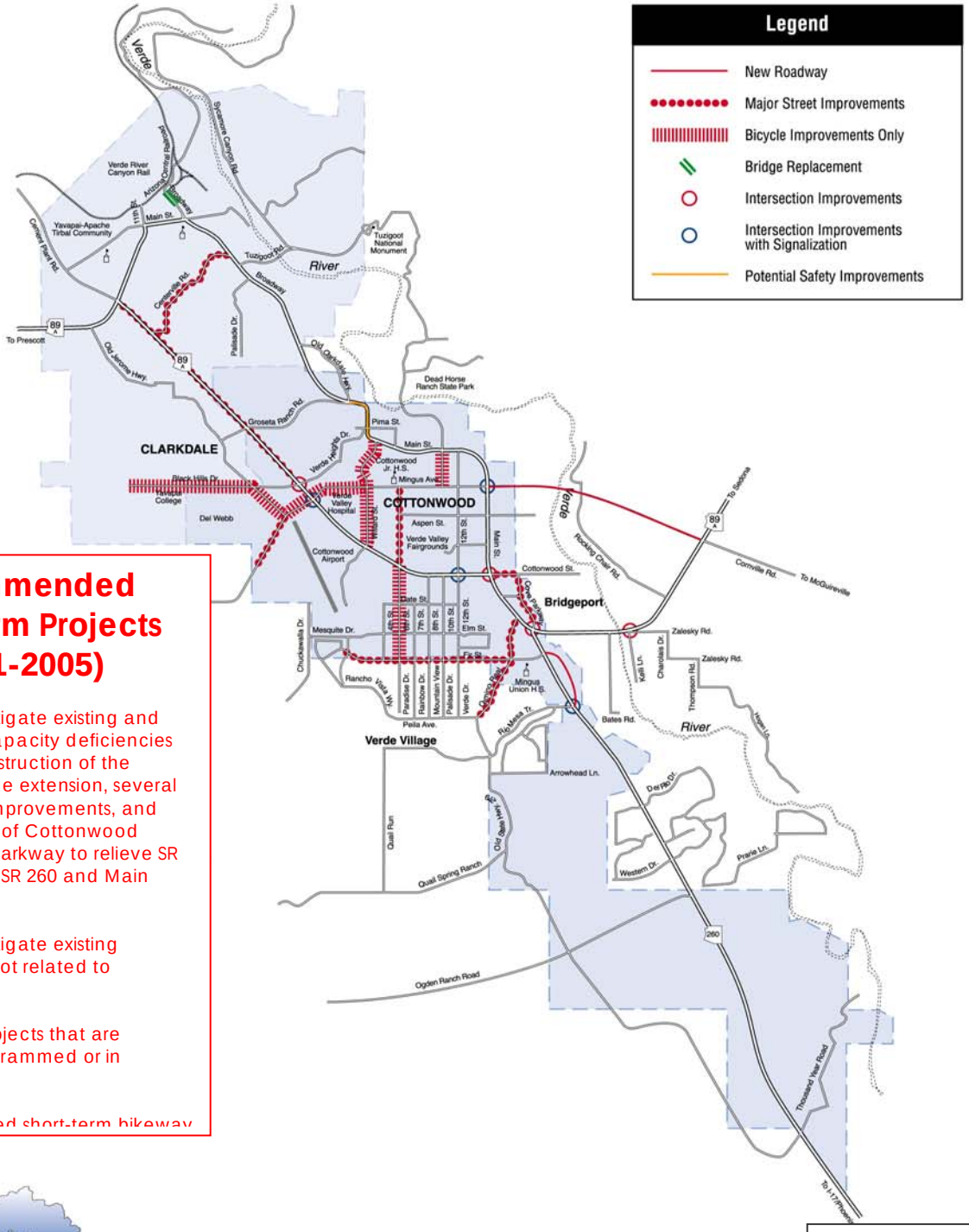
- **SR 260 State Trust Land:** In conjunction with future private development, the creation of east-west links between Old 279 and SR 260 intersections at Godard, Del Rio and Western Drive.

- **Cornville Road Widening:** As part of the Lima Study and in association with the continued development of Verde Santa Fe, widen Cornville Road to 4 lanes between Tissaw Road and SR 89A.

- **Verde Santa Fe:** In conjunction with future development of the Verde Santa Fe Phase II (North) project, the development of a collector between Tissaw Road and Bill Gray Road.

Fig. 7-9


WEST SR 89A
FUTURE CONTROLLED ACCESS POINTS
MAP LEGEND
TRAFFIC SIGNAL (EXISTING)
FUTURE ACCESS CONTROL POINT
FUTURE ACCESS CONTROL POINT IF WARRANTED BY FUTURE DEVELOPMENT
ARTERIAL
COLLECTOR
COLLECTOR
LOCAL STREET
PLANNED STREET IMPROVEMENTS
BROKEN LINES ARE CONCEPTUAL ROUTES ONLY. NO IMPROVEMENTS PROGRAMMED AT THIS TIME.
CEMENT PLANT RD
PALISADE RD.
LINCOLN
LISA
89A
OLD JEROME HWY
GROSETA RANCH RD.
PAUL'S BLVD
CLARKDALE HWY
BLACK HILLS DR.
YAV. COLL.
AIRPORT RD.
MINGUS AVE.
N



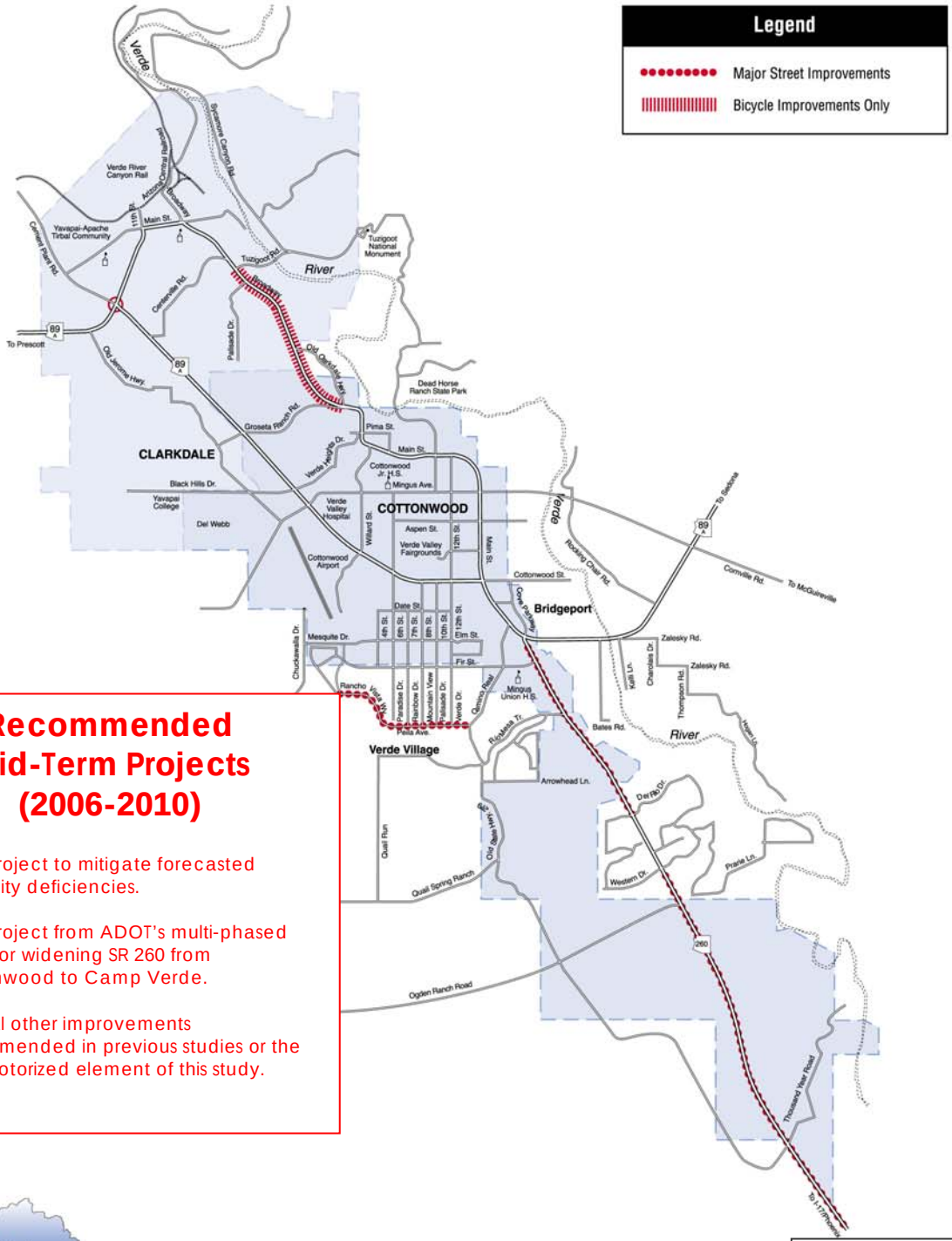
Recommended Short-Term Projects (2001-2005)

- Projects to mitigate existing and forecasted capacity deficiencies including construction of the Mingus Avenue extension, several intersection improvements, and improvement of Cottonwood Street/Cove Parkway to relieve SR 89A between SR 260 and Main Street.
- Projects to mitigate existing deficiencies not related to capacity.
- Additional projects that are currently programmed or in progress.
- Recommended short-term bikeway

Fig. 7-10

Cottonwood Area Transportation Plan

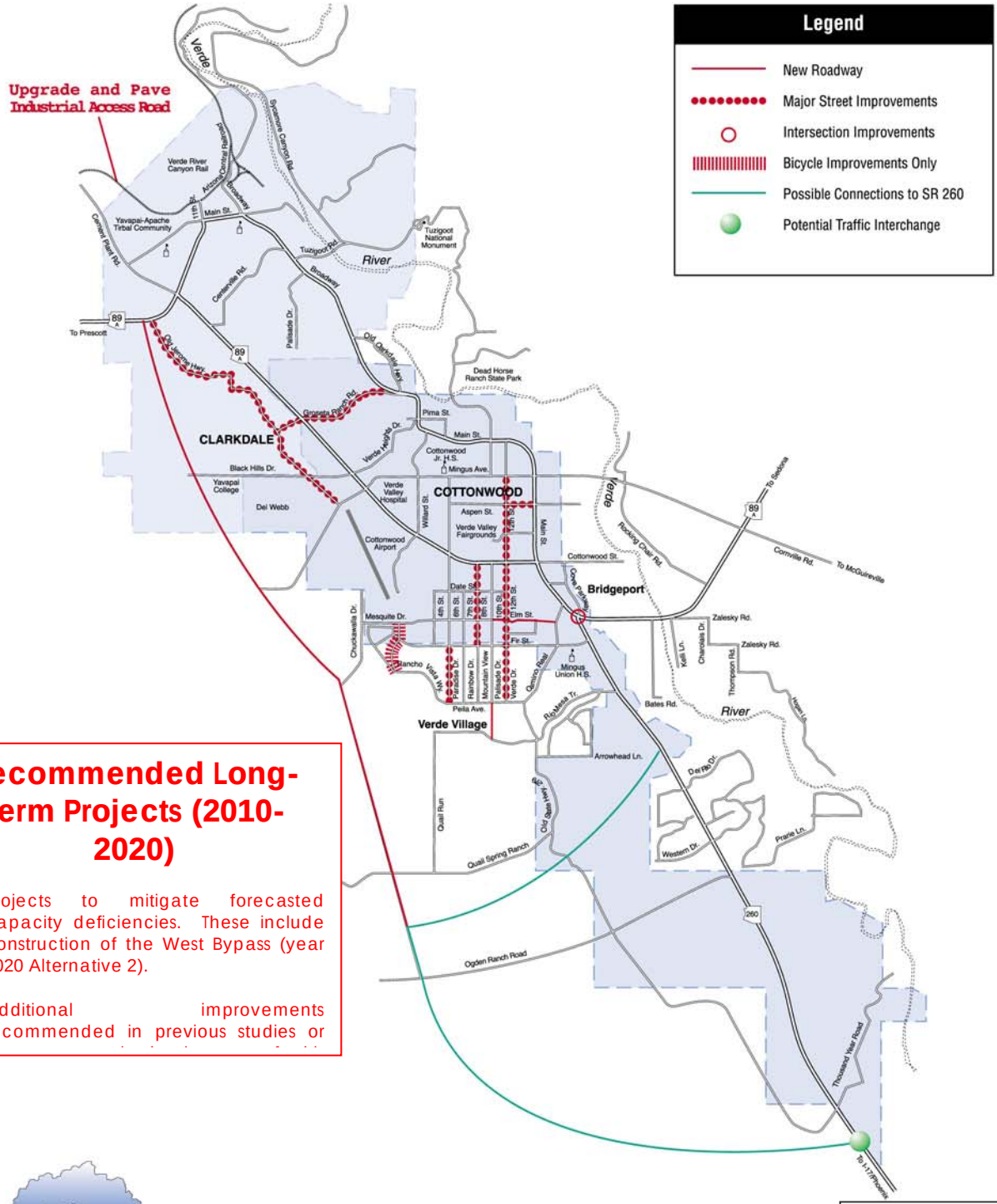
BRW A DAMES & MOORE GROUP COMPANY



Recommended Mid-Term Projects (2006-2010)

- One project to mitigate forecasted capacity deficiencies.
- One project from ADOT's multi-phased plans for widening SR 260 from Cottonwood to Camp Verde.
- Several other improvements recommended in previous studies or the non-motorized element of this study.

Fig. 7-11



Recommended Long-Term Projects (2010-2020)

- Projects to mitigate forecasted capacity deficiencies. These include construction of the West Bypass (year 2020 Alternative 2).
- Additional improvements recommended in previous studies or

Fig. 7-12

Cottonwood Area Transportation Plan

BRW A DAMES & MOORE GROUP COMPANY

TABLE 7.1

CURRENT INVENTORY OF CORRIDOR IMPROVEMENT PROJECTS

Limited funding typically requires prioritization of transportation improvement projects. To assist in establishing priorities, the traffic study evaluated all proposed projects under five criteria. The five evaluation criteria were traffic safety, congestion reduction, cost-effectiveness, design standard conformity and economic development impact. None of the recommended short-term projects can actually be implemented by 2005, except for those that have already been programmed. The table does not consider partial development of the west loop or any of its related connections. Some improvements target a specific deficiency. Others were listed by the study as "additional" projects which contribute more generally to the efficiency of the respective network (short-mid-long range). All projects are fiscally constrained at present. Shaded entries are entirely unfunded. The total estimated cost of the unfunded projects is nearly $15 million. Costs are in year 2000 dollars.

ST	SEGMT	IMPROVEMENT	RANGE	CWD	CLK	YAV	ADOT
SR 89A W	COTTONWOOD TO CLARKDALE	RIGHT-OF-WAY ACQUISITION		$0	$0	$0	$4,440,000
SR 89A W	BLACK HILLS TO CEMENT PLANT RD.	WIDEN TO FOUR-LANE DIVIDED SECTION WITH RAISED MEDIAN OR CENTER LEFT TURN LANE, RESULTING IN A SECOND SOUTHBOUND THROUGH LANE AT BLACK HILLS. PROGRAMMED FOR FY 2004.	SHORT	$0	$0	$0	$3,325,000
SR 89A W	BLACK HILLS DR INT	REALIGNMENT AND SIGNALIZATION	SHORT				
SR 89A W	BLACK HILLS DR INT	ADD EAST BOUND AND WEST BOUND TURN LANES. RESERVE R/W FOR 2 FUTURE THROUGH LANES IN ALL DIRECTIONS.	SHORT	$182,000	$0	$0	$0
SR 89A E	MAIN ST INTERSECTION	INSTALL RAISED ISLANDS ON APPROACHES TO INTERSECTION; PROHIBIT LEFT TURNS WITHIN 400 FEET; PROHIBIT NEW ACCESS DRIVES WITHIN 200 FEET.	SHORT	$0	$0	$0	$66,000
SR 89A E	260 INTERSECTION	ADD EASTBOUND OVERLAP (PROTECTED RIGHT TURN) PHASING	SHORT LONG	$0	$0	$0	$20,000
SR 89A E	260 INTERSECTION	ADD SECOND EAST BOUND RIGHT TURN LANE.	SHORT LONG	$0	$0	$0	$182,000
SR 89A E	ZALESKY RD. INT	RE-ALIGNMENT	SHORT	$0	$0	$112,000	$170,000
SR 89A E	ZALESKY RD. INT	ADD EAST BOUND DECEL LANE	SHORT	$0	$0	$27,000	$27,000
SR 89A E	ZALESKY RD. INT.	SIGNAL WARRANT EVALUATION	SHORT	$0	$0	$0	$2,500
SR 260 S	COTTONWOOD TO CAMP VERDE	ARCHEOLOGICAL TESTING AND DATA RECOVERY		$0	$0	$0	$700,000
SR 260 S	DEL RIO TO 89A.	WIDEN TO 6 LANES		$0	$0	$0	$2,636,000
SR 260 S	WESTERN DR. SOUTH TO STUDY AREA BDRY	WIDEN TO 4 LANES, DIVIDED HWY	MID	$0	$0	$0	$2,971,000
SR 260 S / SR 89A E	BYPASS	INSTALL FREEWAY STYLE LIMITED ACCESS CONNECTION BETWEEN HIGHWAYS, EAST OF CITY.	MID				
6TH ST S	E. MINGUS AVE TO FIR ST	REHAB PAVEMT (MINGUS TO 89A) STRIPE 5' BK LANES (MINGUS TO FIR).	SHORT	$127,000	$0	$0	$0
6TH ST S PARADISE DR	PEILA TO FIR	UPGRADE TO 2-LN URBAN SECTION	LONG	$0	$0	$250,000	$0
8TH ST S	89A TO FIR ST	RECONSTR 2-LN URBAN SECTION W/BK LANES		$400,000	$0	$0	$0
10TH ST S	N. MAIN ST TO E. MINGUS AVE	BIKE ROUTE SIGNS	SHORT	$400	$0	$0	$0
12TH ST S / VERDE DR	89A SOUTH TO PEILA AVE.	RECONSTR 2-LN URBAN SECTION	MID	$1,858,000	$0	$???	$0
12TH ST	MINGUS TO 89A	RECONSTRUCT 2-LANE URBAN SECTION WITH BIKE LANES.	LONG				
16TH ST S	ELM TO BASHAS	NEW CONNECTION WITH ELM, DATE AND SKYLINE	MID	???	$0	$0	$0
ASPEN ST E	E 12TH ST TO S. MAIN	RECONSTR 2-LN URBAN SECTION		$150,000	$0	$0	$0
AIRPORT RD / JEROME HWY	WEST MINGUS AVE TO 89A	2-LN URBAN SECTION. BIKE RT SIGNS FROM SCENIC DR TO BLACK HILLS DR.	LONG	$1,400,000	$???	$0	$0
BLK HILLS DR	CONNECTION TO W. LOOP VIA YAVAPAI COLLEGE	NEW CONNECTION AND ACCESS TO YAVAPAI COLLEGE					
CAMINO REAL	SR 89A TO PEILA AVE	UPGRADE TO 2-LN URBAN SECTION W/BK LANES	SHORT	$465,000	$0	$465,000	$0
CORNVILLE RD	SR 89A TO TISSAW RD	WIDEN TO 4-LANES					
CTWD ST W	WILLARD TO AIRPARK	NEW CONNECTION					

CTWD ST E COVE PKWY	SR 89A TO SR 260	CREAT CONTINUOUS FREE FLOWING ROUTE, 4 LANES IF POSSIBLE. AVOID FURTHER SIGNALIZATION.	SHORT	$1,186,000	$0	$0	$0
DEL RIO	260 TO OLD 279 AND/OR W. LOOP	NEW CONNECTION					
ELM ST E	S, 10TH ST TO CAMINO REAL	CONSTR AS 2-LN URBAN SECTION	MID	$925,000	$0	$0	$0
ELM ST W	WILLARD TO W. MINGUS	NEW CONNECTION					
FIR ST W	WEST CITY LIMITS TO WEST LOOP	NEW CONNECTION					
FIR ST E	CAMINO REAL INTERSECTION	LEFT TURN LANES AND POSSIBLE SIGNALIZATION	LONG				
GODDARD RD	260 TO OLD 279 AND/OR W. LOOP	NEW CONNECTION AND POSSIBLE UPGRADE TO QUAIL SPRINGS RD.					
GROSETA RANCH RD	N. MAIN ST TO OLD JEROMME HWY	2-LN W/BIKE RT. SIGNAL AT 89A. ACQUIRE ROW, PAVE AND BK RT SIGNS	LONG	$1,586,000	$???	$0	$0
MAIN ST N	N. CACTUS ST TO N. WILLARD ST	FEASIBILITY STUDY FOR OLD TOWN SAFETY IMPROVEMENTS AT BLIND CURVES ALONG NORTH MAIN STREET (AND OTHER TRAFFIC MITIGATION).	MID	$25,000	$0	$0	$0
MAIN ST N	YUMA TO CENTERVILLE RD	BICYCLE IMPROVEMENTS		$1,400	$5,800	$0	$0
MINGUS E	NORTH MAIN ST TO CORNVILLE RD	SIGNAL AT MAIN ST WITH E/W LEFT TURN LANES. 2-LANE EXTENSION EAST (WITH BICYCLE LANES) TO CORNVILLE RD. RESERVE ROW FOR 4 LANES.	SHORT	$1,270,000	$0	$8,730,000	$0
MINGUS W	WILLARD TO 89A	RECONSTRUCT URBAN SECTION. ADD BIKE LANES	SHORT	$2,000	$0	$0	$0
MINGUS W	SR 89A TO YAVAPAI COLLEGE, W. LOOP	SIGN MINGUS AVE/AIRPORT RD/BLACK HILLS DR AS BIKE ROUTE,	SHORT	$400	$300	$300	$0
MINGUS W	AIRPORT RD TO WEST LOOP	DESIGN AND PAVE	SHORT	$292,000	$0	$0	$0
MONTE TESORO	MESQUITE DR SOUTH TO RANCHO VISTA	ADD BIKE LANES	LONG	$1,200	$0	$1,200	$0
MTN VW	PEILA TO RIO MESA	COMPLETE CONNECTION		$0	$0	$462,000	$0
PEILA AVE	CAMINO REAL TO RANCHO VISTA	2-LN URBAN SECTION WITH BOX CULVERT AND BIKE ROUTE SIGNS	MID	$1,800	$0	$350,000	$0
OGDEN RCH	260 TO W. LOOP	DESIGN, ACQUIRE R/W, UPGRADE & PAVE.	LONG				
RANCHO VISTA	MONTE TESORO / PEILA AVE	2-LN URBAN SECTION AND BIKE ROUTE	MID	$0	$0	$300,000	$0
RIO MESA	260 INTERSECTION	REALIGNMENT AND SIGNAL	SHORT	$384,000	$0	$0	$68,000
RIO MESA	SR 260 TO FIR ST	CONSTRUCT NEW LOOP ACCESS TO COMMERCIAL AREA EAST OF SR 260, INTERSECTING 260 AT RIO MESA DR & FIR ST AS 4-LEG INTERSECTION.	SHORT	$2,512,000	$0	$0	$0
TRAIL / DEL MONTE	WEST CITY LIMITS TO VERDE	DEVELOP CONNECTIVE MULTI-USE PATH IMPROVEMENTS	SHORT	$155,000	$0	$0	$0
TRAIL / LITTLE OAK	WEST CITY LIMITS TO VERDE RIVER.	DEVELOP MULTI-USE PATHS	LONG	$112,000	$0	$???	$0
TRAIL / MESCAL GULCH	WEST CITY LIMITS TO V. RIVER.	DEVELOP MULTI-USE PATH	LONG	$129,000	$0	$0	$0
TRAIL / SILVER SPRINGS	WEST CITY LIMITS TO VERDE	DEVELOP CONNECTIVE MULTI-USE PATH IMPROVEMENTS	SHORT	$215,000	$0	$0	$0
WEST LOOP	FROM OGDEN RANCH RD TO 89A WEST OF CEMENT PLANT ROAD	CONSTRUCT. REQUIRES YAV CO TO FUND (AS A REGIONAL FACILITY) APPROX 68% OF THE CLARKDALE PORTION. ALSO REQUIRES AN ADDNL $30,000 FROM CLARKDALE ($492,000 TOTAL) FOR COMPLETION BY 2020.	LONG	$462,000	$462,000	$4,469,000	$0
WILLARD ST	MAIN TO 89A	BIKE ROUTE SIGNS	SHORT	$1,000	$0	$0	$0
WILLARD ST.	MESQUITE-CTWD ST	EXTEND 2-LN URBAN SECTION ($300K FED GRANT 2006)	MID				

PUBLIC TRANSIT

The Cottonwood Area Transit System (CATS) is one of the oldest and most successful small transit systems in Arizona, and the only public system in Yavapai County. CATS provides public transportation services to the City of Cottonwood, Town of Clarkdale, all Verde Village units, and the area of Bridgeport. The system also provides contract services to several specific organizations in addition to a dial-a-ride service. All of the system's three primary vehicles are "disabled-accessible" with a wheelchair lift. C.A.T.S. has two vehicles on the demands system (door to door) which operates Monday through Friday, 10 hours a day and 5 hours on Saturday. On January 7, 2002, C.A.T.S. initiated a fixed route system which also accommodates certain deviations from the primary route for people who cannot get to the bus stop. This bus route operates Monday through Friday 10 hours a day. There is also an interest in extending the hours of service until 6:00 PM on weekdays and after 2:00 PM on Saturday.

In some ways, however, CATS has been the victim of its own success as demand for service has continued to grow, increasingly outstripping available capacity despite the absence of advertising to promote the system. As a result, nearly one-fourth of customer service requests have had to be deferred or denied in recent years. In October, 2002 C.A.T.S. put a third bus on the demand system. The City is also exploring the possibility of participating in a regional transit system. Table ES.9 lists several potential strategies for meeting the current and anticipated challenges facing transit in Cottonwood. The table also summarizes major advantages and disadvantages of each strategy.

AIRPORT

The Cottonwood Municipal Airport has a 4,250 foot asphalt runway and an associated taxiway. Identification, runway, taxiway and approach lighting are installed at the airport. Fuel facilities, apron and aircraft parking are also available. The office of the fixed base operator, Cottonwood Air Service, currently functions as a terminal building, however, the city intends to construct a new terminal facility within the next few years.

TABLE 7.2	1995	2000	2005	2010	2015
Service Area Population	28,065	31,685	33,335	39,320	43,775
Annual Enplanements	4,200	4,900	5,700	6,500	7,500
Annual Departures	1,400	1,650	1,900	2,200	2,500
Annual Commuter Operations	2,800	3,300	3,800	4,400	5,000

According to the master plan, improvements to the airport will be required to meet aviation demands. These improvements include additional hangers, apron tie-downs, parking and increased fuel storage capacity. It was recommended that pavement strength be increased to accommodate heavier aircraft and a new, parallel taxiway be created.

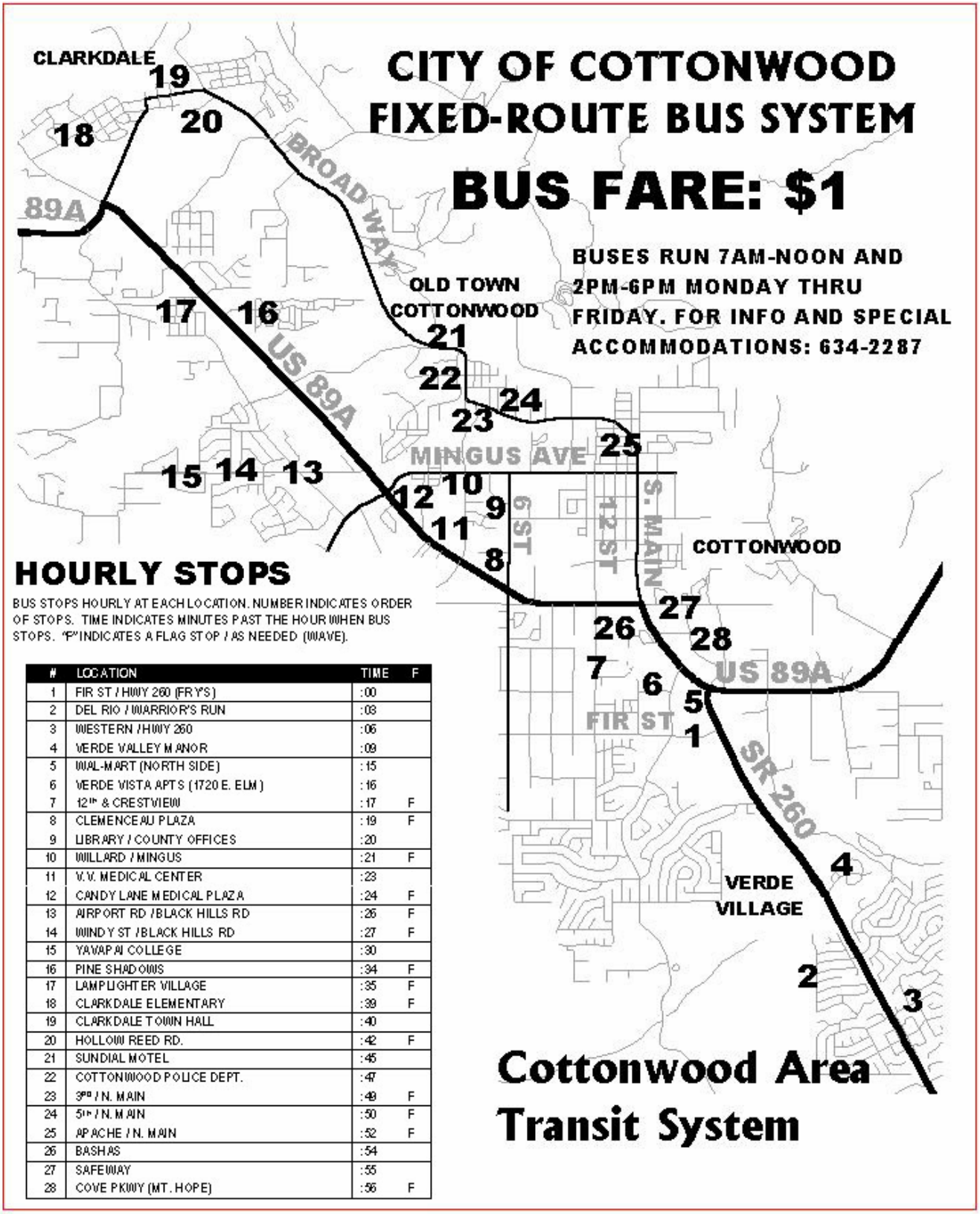
NON-MOTORIZED TRANSPORTATION

There are numerous opportunities for the development of non-motorized transportation (walking, bicycling) that may help to offset some of the traffic impact on the City, as well as to provide needed recreational opportunities.

Figure 7-14 illustrates a proposed network of bikeways and multi-use paths for Cottonwood and Clarkdale. Many of the on-street facilities were recommended in the 1993 Verde Valley regional plan, others would be incorporated in major roadway construction or reconstruction, and still others would provide key connections to enhance the connectivity of the system. Most of the off-road paths use alignments from the Cottonwood and Clarkdale General Plans. A proposed multi-use path along the planned Verde River Greenbelt is also shown. Figure 7-14 highlights a proposed loop trail serving several

major destinations. It is recommended that this trail, much of which is on city-owned property, be developed as a high-priority demonstration project.

The 100-year floodplain which follows major drainage channels would also provide opportunities for the development of pedestrian routes, in addition to on-street sidewalk sections. Convergence points between these two systems may provide opportunities for trail heads and access points. A more detailed study of these opportunities could also be developed as an amendment to this plan.



HOURLY STOPS

BUS STOPS HOURLY AT EACH LOCATION. NUMBER INDICATES ORDER OF STOPS. TIME INDICATES MINUTES PAST THE HOUR WHEN BUS STOPS. "F" INDICATES A FLAG STOP / AS NEEDED (WAVE).

#	LOCATION	TIME	F
1	FIR ST / HWY 260 (FRY'S)	:00	
2	DEL RIO / WARRIOR'S RUN	:03	
3	WESTERN / HWY 260	:06	
4	VERDE VALLEY MANOR	:09	
5	WAL-MART (NORTH SIDE)	:15	
6	VERDE VISTA APTS (1720 E. ELM)	:16	
7	12TH & CRESTVIEW	:17	F
8	CLEMENCEAU PLAZA	:19	F
9	LIBRARY / COUNTY OFFICES	:20	
10	WILLARD / MINGUS	:21	F
11	V.V. MEDICAL CENTER	:23	
12	CANDY LANE MEDICAL PLAZA	:24	F
13	AIRPORT RD / BLACK HILLS RD	:26	F
14	WINDY ST / BLACK HILLS RD	:27	F
15	YAVAPAI COLLEGE	:30	
16	PINE SHADOWS	:34	F
17	LAMPLIGHTER VILLAGE	:35	F
18	CLARKDALE ELEMENTARY	:39	F
19	CLARKDALE TOWN HALL	:40	
20	HOLLOW REED RD.	:42	F
21	SUNDIAL MOTEL	:45	
22	COTTONWOOD POLICE DEPT.	:47	
23	3RD / N. MAIN	:49	F
24	5TH / N. MAIN	:50	F
25	APACHE / N. MAIN	:52	F
26	BASHAS	:54	
27	SAFEWAY	:55	
28	COVE PKWY (MT. HOPE)	:56	F

Fig. 7-13

TABLE 7.3: POTENTIAL STRATEGIES FOR COTTONWOOD AREA TRANSIT

Strategy	Advantages	Disadvantages
Seek new funding sources to improve and expand service.	• New funding sources such as County half-cent sales tax and HB 2565 funds can be used for transit.	• Competition from roadway project needs is stiff, especially for sales tax funds.
Increase passenger fares.	• Higher fares can be used to improve service, and as a demand management tool with different peak and off-peak fares. • Low fares can be maintained for low-income customers	• Unpopular with customers and the community. • Some choice riders will stop using the system.
Convert to pure reserve-a-ride operation (no same day calls).	• Eliminates or greatly reduces service denials. • Greater lead time allows more efficient routing and scheduling of vehicles.	• Eliminates flexibility to respond to immediate travel needs. • May have little impact if most trips are already provided on reserved basis.
Re-evaluate service contracts with outside organizations.	• Could free up more vehicle time for individual trip requests.	• May adversely affect the neediest customers. • Removes an important source of revenue.
Bring more vehicles into service by using volunteer drivers.	• Could allow improved service with minimal additional funding needs. • Could promote community interest and involvement.	• Qualified, available volunteers may be hard to find. • City would still incur other vehicle operating costs. • Back-up vehicles may not be as comfortable or reliable in regular service.
Consider conversion to a deviated fixed route operation (mid to long term).	• Lower cost per customer served. • No advance reservation required. • Reliable travel and arrival times.	• Difficult to serve entire community at a reasonable cost. • Dispatcher still required to handle deviation requests and ADA trips. • Restricts door-to-door convenience.
Use future regional service to leverage support for local area needs.	• Could expand travel opportunities for transit riders.	• No regional service or funding currently exists. • Loss of local autonomy and flexibility may be a concern in an integrated system.

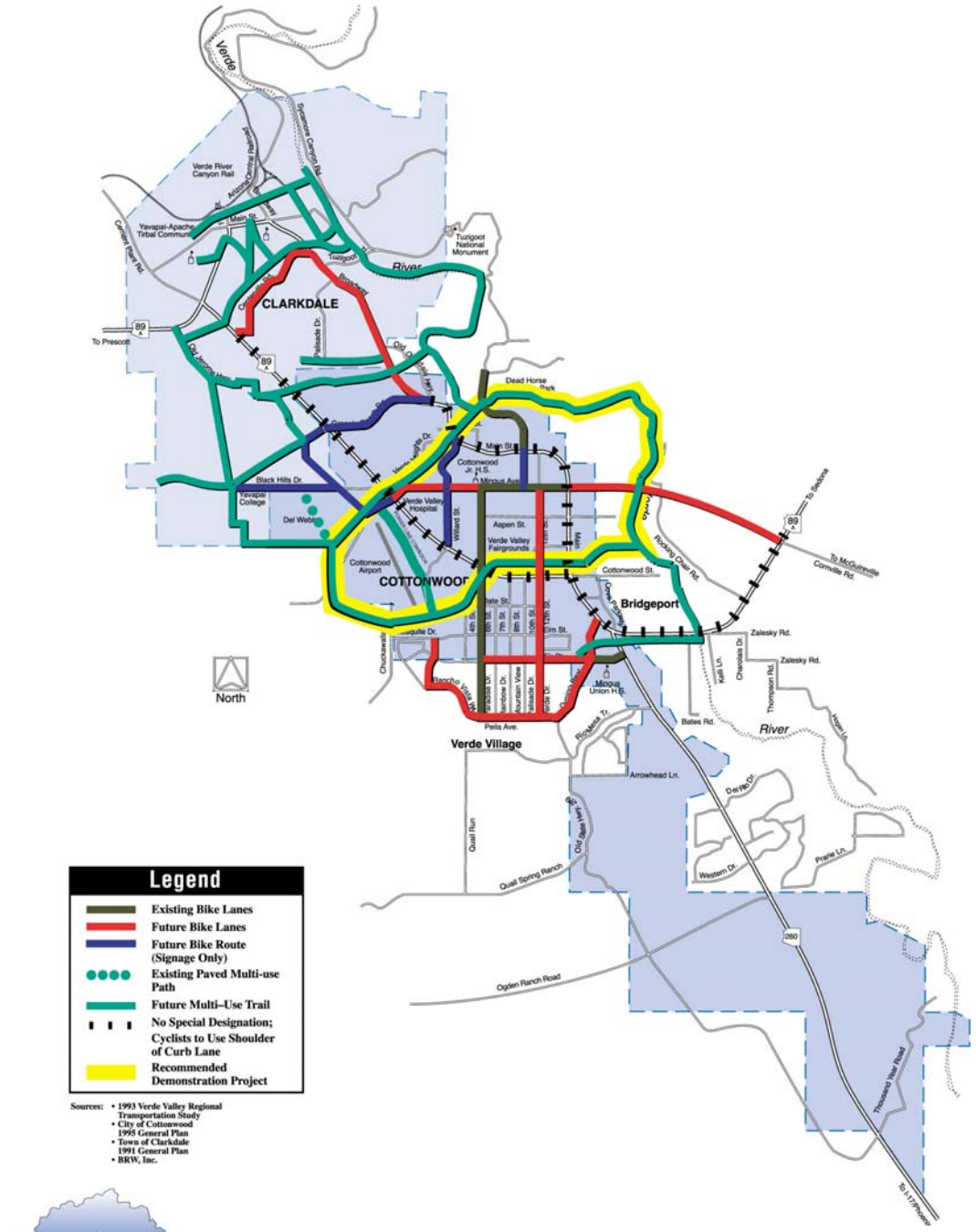
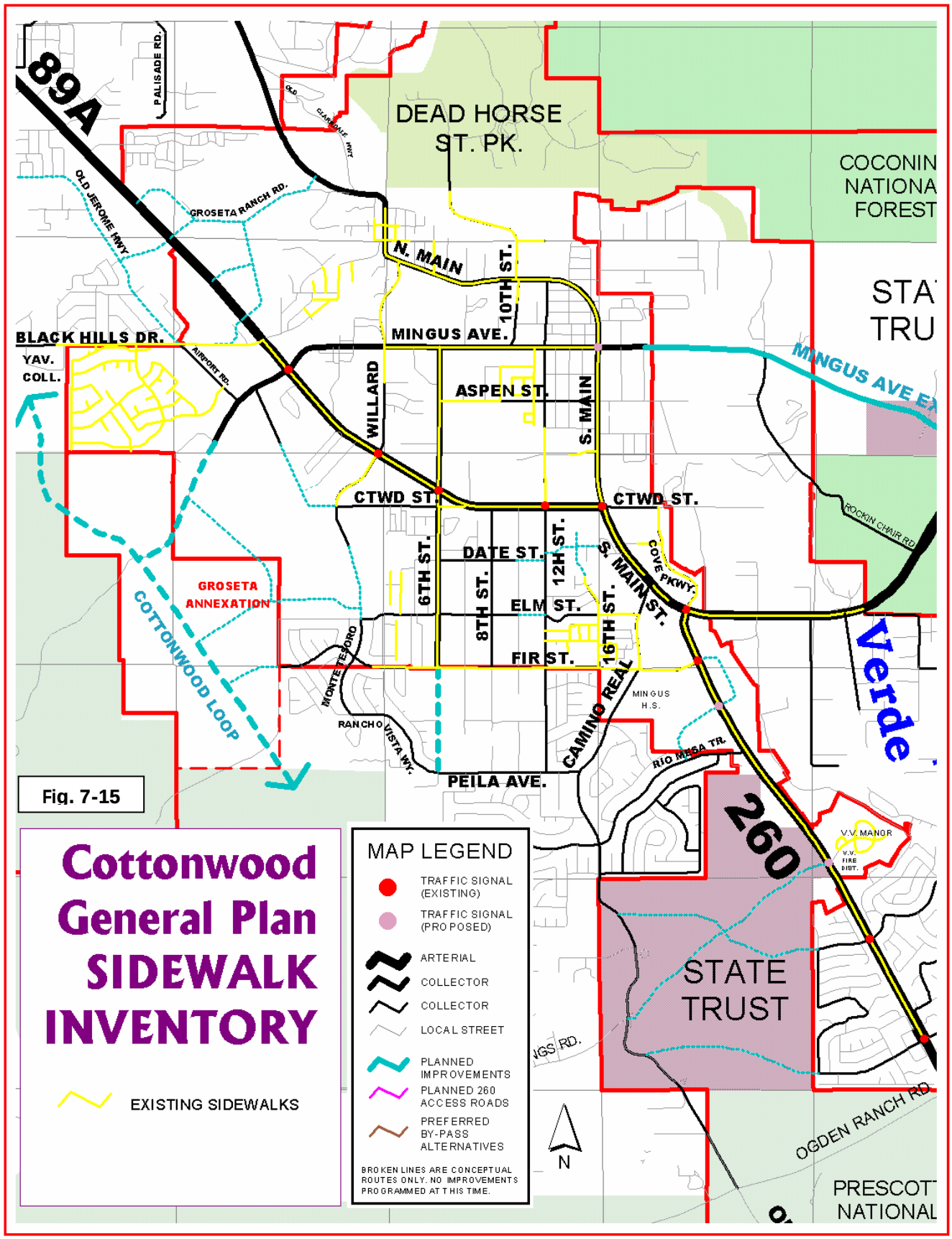


Fig. 7-14
Non-Motorized Transportation System Plan


89A
PALISADE RD.
OLD JEROME HWY
GROSETA RANCH RD.
DEAD HORSE ST. PK.
COCONIN NATIONA FOREST
N. MAIN
10TH ST.
MINGUS AVE.
BLACK HILLS DR.
YAV. COLL.
AIRPORT RD.
WILLARD
ASPEN ST.
S. MAIN
MINGUS AVE EX
CTWD ST.
CTWD ST.
ROCKIN CHAIR RD
6TH ST.
DATE ST.
12H ST.
S. MAIN ST.
COVE PKWY.
GROSETA ANNEXATION
8TH ST.
ELM ST.
16TH ST.
COTTONWOOD LOOP
MONTEZUMA DR.
FIR ST.
MINGUS H.S.
CAMINO REAL
RANCHO VISTA WY.
RIO MESA TR.
PEILA AVE.
Verde
260
V.V. MANOR
V.V. FIRE DIST.
STATE TRUST
OGDEN RANCH RD.
PRESCOTT NATIONAL
N
Fig. 7-15
Cottonwood General Plan SIDEWALK INVENTORY
EXISTING SIDEWALKS
MAP LEGEND
TRAFFIC SIGNAL (EXISTING)
TRAFFIC SIGNAL (PROPOSED)
ARTERIAL
COLLECTOR
COLLECTOR
LOCAL STREET
PLANNED IMPROVEMENTS
PLANNED 260 ACCESS ROADS
PREFERRED BY-PASS ALTERNATIVES
BROKEN LINES ARE CONCEPTUAL ROUTES ONLY. NO IMPROVEMENTS PROGRAMMED AT THIS TIME.

E. KEY ISSUES

The City of Cottonwood desires a safe and efficient circulation system for autos, transit, bicycles and pedestrians which also benefits local commerce. The system, developed in partnership with the Arizona Department of Transportation (ADOT), Yavapai County and the Town of Clarkdale, must meet the needs of local residents, visitors to the region; and regional traffic attracted to commercial, medical and community facilities in Cottonwood. As demonstrated by Section 4, "Community Vision," Cottonwood's General Plan seeks to strike a balance between the needs of economic development and preserving its small town qualities. The Circulation Element therefore focuses on encouraging safety and efficiency, consolidation of impacts, economic development and community aesthetics. The following are the basic issues:

1. **Widening of SR 260 between Western Drive and I-17.** Given the increasing traffic volume and congestion along SR 260, the City should continue to encourage the widening of SR 260 to four lanes between Western Drive and I-17; to work with ADOT to ensure quality access management of its highways within and adjacent to the City; and to investigate opportunities for participation by ADOT in the development of collectors and other traffic improvements which serve to offload state highways.

2. **Focused Development:** As a primary service center in the Verde Valley, much regional traffic converges on Cottonwood. Both traffic studies suggest continued and substantial traffic increases in view of growth projections. The General Plan encourages a pattern of land use which minimizes traffic, is sensitive to the impacts of traffic on adjacent land uses and allows the flexibility which may be required to coordinate the development of secondary routes necessary to offload congestion. Traffic is a major influence on the type of land uses which are most appropriate for various areas of the City. The Land Use Element identifies four focus areas which encourage a mixture of land uses necessary to minimize traffic.

3. **Reliance on the State Highway System:** Like many communities, Cottonwood's development pattern results in a heavy reliance on the State highway system. The only arterial routes in the community are the two State highways. As traffic has grown in recent years (far more than population growth), this over reliance on the State highways has led to increased levels of congestion in portions of the community during the busy times of the day. Much of this congestion stems from the two conflicting functions of these arterials – as thoroughfares for regional and State-wide traffic and as local access to commercial and other community uses. Another contributing factor was the platting and development of 4,500 lots in the Verde Village units during the 1970s without adequate connection to the rest of the region. Over 11,000 people now reside in this area and most must use SR 260 for every trip. The City of Cottonwood has worked extensively in recent years to develop and improve collector streets in order to improve mobility and connections in the area. Examples include 6th Street, 12th Street and Fir Street (in conjunction with Yavapai County). In coming years the City intends to complete the link between Willard Street and Monte Tesoro that will improve access to Units 6-8. The City should continue its efforts to make better use of its collector system in offloading congested areas, particularly shopping centers and develop its own access management guidelines for primary traffic routes.

4. **Regional Traffic Planning:** Cottonwood developed originally as the commerce center for the region which includes Jerome, Clarkdale and Clemenceau. As the Verde Valley has grown to a population of about 60,000 (35,000 in

greater Cottonwood), our regional role has remained the same. Cottonwood continues to be the center for shopping, personal and business services, medical services, affordable housing and government services in the Verde Valley. It is important that the community's circulation system be adequate to continue fulfilling this regional role. The Lima study recommended that all new regional roads be constructed as limited or controlled access highways and that necessary rights-of-way be acquired as soon as possible in order to guarantee the most efficient alignment of those corridors. The study also recommends the establishment of a regional land use planning process as a means of better coordinating traffic planning and improvements. Such a process may also provide better opportunities to encourage regional funding by demonstrating the significance of local improvements to the Verde Valley; participation in the review of regional road development and bypass corridor proposals and in decisions that affect the future of adjacent State and Federal lands.

5. **Special Traffic Studies:** The City may also consider installing guidelines for requiring traffic impact studies of new development, based on a significant change in land use, new arterial access, overall traffic increase, etc.). New corridors identified by the Circulation element should also be coordinated with the Land Use Element.

6. **Multi-modal Transportation Opportunities:** Traffic volume can be reduced with the effective development of multiple transportation modes. Although Cottonwood presently has a bus system, local demographics suggest there may be reason enough to take a closer look at further development of this system. A new master plan for the Cottonwood airport is also pending completion at this time. Continued roadway development should also be considerate of opportunities to accommodate wide curb lanes for bicycle traffic and sidewalks for pedestrians. Wash corridors are also prime opportunities for trails development. The Lima report suggested a regional transit study and the development of a "park and ride facility" east of the City.

7. **Funding Transportation Improvements:** It is crucial that additional funding resources be developed for the maintenance of existing roadways, the development of new traffic improvements and the timely acquisition of necessary rights-of-way. The City should consider the establishment of development impact fees, although they cannot be used to fix old problems. Other means might also be considered such as property taxes, regional revenue sharing, or enabling a greater share of sales tax revenues from the County's highway fund.

F. GOALS & OBJECTIVES

FOCUS: The Circulation Element is intended to encourage a system of circulation and transportation which is safe and efficient; protects residential areas from traffic impacts; benefits economic development; and contributes to the small town charm of the community.

GOAL CIR-1 PROVIDE FOR A SAFE AND EFFICIENT SYSTEM OF TRAFFIC MOVEMENT WHICH IS BENEFICIAL TO RESIDENTS, VISITORS AND COMMERCE.

- OBJECTIVE 1.1 Encourage focused development which minimizes traffic and other impacts.

  1.1.A Identify various locations on the Proposed Land Use Map where mixed use "focus areas" would be encouraged subject to land use, circulation and other physical development guidelines.

  1.1.B Establish a local roadway classification system appropriate to serve local and regional needs. Coordinate the classification system with the Land Use Element.

  1.1.C Amend the Zoning ordinance to establish appropriate guidelines for "planned areas" as well as for smaller units of neighborhood redevelopment which result in circulation improvements.

- OBJECTIVE 1.2 Ensure adequate traffic safety and improvements

  1.2.A Conduct special area studies to identify safety issues around the City and to improve traffic calming in neighborhoods.

  1.2.B Adopt design guidelines for new streets and roadway improvements which protect neighborhoods from traffic impacts, do not exacerbate traffic speeds or street capacity; and better accommodate pedestrians, bicycles and buses.

  1.2.C Install medians where useful or necessary to restrict turning movements in high traffic areas.

  1.2.D Work with A.D.O.T., Yavapai County and others to accelerate the planned widening of SR 260 from Western Drive to I-17.

- OBJECTIVE 1.3 Relieve congestion from highways and commercial areas

  1.3.A Make better use of the City's collector system in providing alternate routes which relieve traffic from congested areas; provides major collector streets for business and visitor traffic; and low capacity through streets so residents can travel across town without the need to use state highways.

1.3.B Identify areas around the City which may have special traffic problems and conduct special area planning to establish better opportunities for relief of congestion.

1.3.C Conduct a study to identify appropriate truck routes within the City and develop a truck route policy.

1.3.D Continue to investigate opportunities for participation by the Arizona Department of Transportation in the development of City streets, collectors and other transportation improvements which offload traffic from state highways.

1.3.E Regularly monitor traffic movement through the City and calibrate traffic signals so that traffic movement is most efficient.

1.3.F Adopt standards for driveway sizing and spacing.

- OBJECTIVE 1.4 Encourage alternate transportation modes such as transit, walking and bicycle use.

1.4.A Conduct a special study to examine the possibility of expanding the City's bus system and possible links to a regional transit system.

1.4.B Participate in the development of a "park and ride facility" east of the City.

1.4.C Develop a bicycle and pedestrian plan for the City to incorporate into the review of new development and to guide City street improvements. The plan should highlight trip generation and destination points, potential hazards and barriers, recommend necessary facilities, opportunities to coordinate with the City bus system, regional connections, safety features and education, addresses compliance with AASHTO standards, special traffic detection devices where necessary and standard signage. The plan should also provide for related promotion and public education; and coordination with ADOT to ensure implementation along State highways.

1.4.D Develop a street improvement and maintenance plan which also addresses bus stops, bike facilities, trails, sidewalks, street trees and otherwise encourages use by bicyclists and pedestrians

- OBJECTIVE 1.5 Improve the visual and aesthetic components of City streets and other public areas.

1.5.A Develop standards for streetscape design and signage which acknowledge the importance of the public realm, encourage small town amenities, aesthetics and topographically sensitive circulation components, especially in residential areas.

1.5.B Determine the feasibility of a comprehensive street tree program for major streets that addresses water availability and costs, right of way issues and available funding.

GOAL CIR-2 ENCOURAGE CONTINUED COORDINATION OF TRAFFIC AND CIRCULATION PLANNING AND IMPROVEMENTS.

- OBJECTIVE 2.1 Continue to participate in regional planning.

  2.1.A Actively coordinate and participate with other Verde Valley jurisdictions in the regional review of land use and transportation issues.

  2.1.B Participate in access management of state highways and other major City streets.

  2.1.C Continue to monitor ADOT's recently proposed SR 260 bypass alternatives and consider amendments to the City's traffic study in response to any new findings. Encourage review of regional traffic study as part of evaluating bypass and corridor options. Update the City's traffic study as appropriate.

  2.1.D Encourage the development of a regional transit system.

- OBJECTIVE 2.2 Continue to monitor local traffic and impacts.

  2.2.A Identify new and existing City arterials, local streets and collectors which may need further study, including areas where traffic may need to be rerouted or where there is no apparent solution for congestion.

  2.2.B Conduct small area planning for neighborhoods by request in order to identify public safety issues and improvements for the accommodation of pedestrians and other alternative transportation.

  2.2.C Conduct access management, design concept and location studies for new corridors so that right-of-ways may be precisely defined and acquired for priority corridors.

  2.2.D Continue to prioritize, and implement necessary traffic improvement projects and right-of-way acquisition in coordination with the Capital Improvements Plan.

  2.2.E Establish guidelines for when traffic studies are required in the review of new development (pertaining to significant change in land use, new arterial access, overall traffic increase, etc.).

- OBJECTIVE 2.3 Provide funding for City transportation improvements.

  2.3.A Explore alternative funding and partnership opportunities that allow a high level of maintenance and repair to existing and planned roadways and facilities. Maximize the use of available state and federal transportation funding through match monies, grants and special projects.

  2.3.B Evaluate circulation impacts and roadway maintenance costs of new development and identify short and long term funding sources, ways that adequate fees can be assessed, and "fair share" contributions from developers, taxation sources and potential for regional revenue sharing.

  2.3.C Encourage the use of improvement districts to provide street improvements within specific areas to meet area resident needs.

G. ACTION PLAN

CIRCULATION ELEMENT			
CIR-1	**PROVIDE FOR A SAFE AND EFFICIENT SYSTEM OF TRAFFIC MOVEMENT WHICH IS BENEFICIAL TO RESIDENTS, VISITORS AND COMMERCE.**		
1.1	**Encourage focused development which minimizes traffic and other impacts.**		
	DO-ITEM	AGENCY	TIMELINE
1.1.A	Identify various locations on the Proposed Land Use Map where mixed use "focus areas" would be encouraged subject to land use, circulation and other physical development guidelines.	Community Development	N/A
1.1.B	Establish a local roadway classification system appropriate to serve local and regional needs. Coordinate the classification system with the Land Use Element.	Community Development	N/A
1.1.C	Amend the Zoning ordinance to establish appropriate guidelines for "planned areas" as well as for smaller units of neighborhood redevelopment which result in circulation improvements.	Community Development	1 year
1.2	**Ensure adequate traffic safety and improvements**		
	DO-ITEM	AGENCY	TIMELINE
1.2.A	Conduct special area studies to identify safety issues around the City and to improve traffic calming in neighborhoods.	Community Development / Public Works	As Needed
1.2.B	Adopt design guidelines for new streets and roadway improvements which protect neighborhoods from traffic impacts, do not exacerbate traffic speeds or street capacity; and better accommodate pedestrians, bicycles and buses.	Community Development / Public Works	1 year
1.2.C	Install medians where useful or necessary to restrict turning movements in high traffic areas.	Public Works / ADOT	In association with area planning.
1.2.D	Work with A.D.O.T., Yavapai County and others to accelerate the planned widening of SR 260 from Western Drive to I-17.	Cottonwood Community Development / Public Works Department	On-Going
1.3	**Relieve congestion from highways and commercial areas**		
	DO-ITEM	AGENCY	TIMELINE
1.3.A	Make better use of the City's collector system in providing alternate routes which relieve traffic from congested areas; provides major collector streets for business and visitor traffic; and low capacity through streets so residents can travel across town without the need to use state highways.	Community Development / Public Works	In association with area planning.
1.3.B	Identify areas around the City which may have special traffic problems and conduct special area planning to establish better opportunities for relief of congestion.	Community Development / Public Works	1-2 years
1.3.C	Conduct a study to identify appropriate truck routes within the City and develop a truck route policy.	Community Development / Public Works	2 years
1.3.D	Continue to investigate opportunities for participation by the Arizona Department of Transportation in the development of City streets, collectors and other transportation improvements which offload traffic from state highways.	Community Development / Public Works	Continuous

1.3.E	Regularly monitor traffic movement through the City and calibrate traffic signals so that traffic movement is most efficient.	Public Works	Continuous
1.3.F	Adopt standards for driveway sizing and spacing.	Public Works	1 year
1.4	**Encourage alternate transportation modes such as transit, walking and bicycle use.**		
	DO-ITEM	AGENCY	TIMELINE
1.4.A	Conduct a special study to examine the possibility of expanding the City's bus system and possible links to a regional transit system.	Public Works	2-5 years
1.4.B	Participate in the development of a "park and ride facility" east of the City.	City of Cottonwood / Yavapai County / ADOT	2-5 years
1.4.C	Develop a bicycle and pedestrian plan for the City to incorporate into the review of new development and to guide City street improvements. The plan should highlight trip generation and destination points, potential hazards and barriers, recommend necessary facilities, opportunities to coordinate with the City bus system, regional connections, safety features and education, addresses compliance with AASHTO standards, special traffic detection devices where necessary and standard signage. The plan should also provide for related promotion and public education; and coordination with ADOT to ensure implementation along State highways.	Community Development / Public Works / ADOT	2 years
1.4.D	Develop a street improvement and maintenance plan which also addresses bus stops, bike facilities, trails, sidewalks, street trees and otherwise encourages use by bicyclists and pedestrians	Public Works / Parks and Recreation	2-5 years
1.5	**Improve the visual and aesthetic components of City streets and other public areas.**		
	DO-ITEM	AGENCY	TIMELINE
1.5.A	Develop standards for streetscape design and signage which acknowledge the importance of the public realm, encourage small town amenities, aesthetics and topographically sensitive circulation components, especially in residential areas.	Community Development	2 years
1.1.B	Determine the feasibility of a comprehensive street tree program for major streets that addresses water availability and costs, right of way issues and available funding.	Public Works	2-5 years
CIR-2	**ENCOURAGE CONTINUED COORDINATION OF TRAFFIC AND CIRCULATION PLANNING AND IMPROVEMENTS**		
2.1	**Continue to participate in regional planning.**		
	DO-ITEM	AGENCY	TIMELINE
2.1.A	Actively coordinate and participate with other Verde Valley jurisdictions in the regional review of land use and transportation issues.	Community Development / Public Works	Continuous
2.1.B	Participate in access management of state highways and other major City streets.	Community Development / Public Works	Continuous
2.1.C	Continue to monitor ADOT's recently proposed SR 260 bypass alternatives and consider amendments to the City's traffic study in response to any new findings. Encourage review of regional traffic study as part of evaluating bypass and corridor options. Update the City's traffic study as appropriate.	Community Development / Public Works	Continuous
2.1.D	Encourage the development of a regional transit system.	Community Development	2-5 years
2.2	**Continue to monitor local traffic and impacts.**		
	DO-ITEM	AGENCY	TIMELINE
2.2.A	Identify new and existing City arterials, local streets and collectors which may need further study, including areas where traffic may need to be rerouted or where there is no apparent solution for congestion.	Community Development / Public Works	1 year
2.2.B	Conduct small area planning for neighborhoods by request in order to identify public safety issues and improvements for the accommodation of pedestrians and other alternative transportation.	Community Development / Public Woks	Continuous

2.2.C	Conduct access management, design concept and location studies for new corridors so that right-of-ways may be precisely defined and acquired for priority corridors.	Community Development / Public Woks	Continuous
2.2.D	Continue to prioritize, and implement necessary traffic improvement projects and right-of-way acquisition in coordination with the Capital Improvements Plan.	Public Works / City Management	Continuous
2.2.E	Establish guidelines for when traffic studies are required in the review of new development (pertaining to significant change in land use, new arterial access, overall traffic increase, etc.).	Community Development / Public Works	1 year
2.3	**Provide funding for City transportation improvements.**		
	DO-ITEM	AGENCY	TIMELINE
2.3.A	Explore alternative funding and partnership opportunities that allow a high level of maintenance and repair to existing and planned roadways and facilities. Maximize the use of available state and federal transportation funding through match monies, grants and special projects.	Public Works	2 years
2.3.B	Evaluate circulation impacts and roadway maintenance costs of new development and identify short and long term funding sources, ways that adequate fees can be assessed, and "fair share" contributions from developers, taxation sources and potential for regional revenue sharing.	Community Development / Public Works / City Management	1 year
2.3.C	Encourage the use of improvement districts to provide street improvements within specific areas to meet area resident needs.	Public Works / City Management	In assoc. with area planning.