

3. CIRCULATION ELEMENT

3.1 Circulation Element Introduction

The Circulation Element is one of the seven mandated general plan elements identified in the State Planning and Zoning Law. Section 65302(b) of the California Government Code specifies that each general plan must include “a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.” The sewer and water public utilities are covered in the Health and Safety Element.

According to State Planning Law, the Circulation Element must be consistent with the other General Plan elements, which are all interrelated. Certain goals and policies of one element may address issues that are primary subjects of other elements. This integration of issues throughout the General Plan creates a strong basis for the implementation of plans and programs and achievement of community goals.

3.2 Transportation in Anderson

The community desires transportation alternatives to the automobile. At the same time, they expect solutions to present-day congestion. Citizens want traffic in residential neighborhoods to be slower, less disruptive and less dangerous to pedestrians.

The City of Anderson can reduce traffic and congestion by improving internal circulation within the City and by becoming a full service City which provides a complete range of retail experiences, services, housing types, and employment opportunities. When citizens are required to travel to other communities the use of parallel routes such as State Route 273 will be encouraged.

Alternatives to the automobile most desired are bicycle and pedestrian ways, including trails, paths, sidewalks, bike lanes and similar facilities.

Additionally the City is served by the regional transit system operated by the Redding Area Bus Authority (RABA). Transit service is available on a commuter route from a transfer site within the City to the Inter-modal Transit Center in Redding. A loop service is also provided on the Anderson end of the route providing limited service within the town. Alternative transportation systems need to connect identified nodes forming real networks. The system needs to be well marked and publicized to the general public.

The Redding Area Bus Authority also provides “Demand Response” service within $\frac{3}{4}$ mile of the fixed service route. Eligible riders may call for service. The Far Northern Regional Center provides transportation for persons with developmental disabilities, the Redding Rancheria Indian Tribe provides transportation to descendants of the indigenous tribes of Shasta County, and the Shasta County Opportunity Center serves individuals with disabilities.

In a city where over 90% of all trips are made by automobile and other alternatives including bicycling and walking represent 1.5% or less of all work trips, alternative transportation is not expected to render vehicular transportation obsolete. However, Anderson has the potential to be a healthy walkable, bikeable City due to the grid street pattern and generous rights-of-way in the Old Town Core. Although alternative transportation modes are supplemental to the street and road system, a choice of circulation alternatives is increasingly important to the quality of life and public health in Anderson.

Because recreational use of alternative transportation modes leads to familiarity and acceptance, implementation of a comprehensive Trails-Sidewalks Network is a high priority. Previous General Plans have included versions of a trail system. Certainly, planning and developing a comprehensive

pedestrian/bicycle system will be difficult and expensive. For that reason, multi-purpose pathways/trails/sidewalks designed to meet the needs of (and to be funded jointly by) both transportation and recreation interests are planned.

3.3 Street Classifications

The following street classifications are used in this General Plan: freeway, expressway, arterial, collector and local street. These classifications are explained below. The specifications for these routes are detailed in the City Code and in the Public Works Standards. Freeways and State Highways are maintained by the California Department of Transportation (Caltrans).

3.3.1 Freeway

Interstate 5 (I-5), a limited access freeway, is the only route of this category in the Anderson Planning Area. This route divides the City, separating the residential areas along the Sacramento River from the older portions of the community near the railroad.

3.3.2 Expressway

An Expressway is a divided multi-lane major arterial street for through traffic with partial control of access and with grade separations at major intersections. State Route 273 (old Highway 99) is an expressway facility paralleling the Southern Pacific Railroad tracks. The expressway continues to be a major connection between the cities of Redding and Anderson. This route is four lanes with a median separation and controlled access. All crossings are at grade.

3.3.3 Arterial

These streets provide the major routes for traffic flow within the City. They connect the areas of high traffic generation; therefore, their function is to move large volumes of traffic and should be designed to perform that function. Typical rights-of-way for arterials are 80 to 108 feet wide.

Pavement width and lane width of arterials may vary. Access from adjoining property should be avoided or consolidated if at all possible to prevent interference with traffic flow. Parking, if provided, may be converted to travel lanes if traffic warrants.

3.3.4 Collector

Collectors are minimum two lane streets with a minimum 60 foot right-of-way. They provide circulation within and between neighborhoods and commercial and industrial areas. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network. Direct driveway connections to the collector streets are discouraged. Usually access is consolidated and driveways have joint access.

3.3.5 Local Street

These are used to provide access to abutting property, locations for utilities, and fire breaks between buildings. Carrying through traffic is a secondary function of local streets and they should be designed to disperse traffic and incorporate traffic calming measures. The use of curvi-linear streets may be needed in hillside areas but the grid street pattern should be used where possible to provide for connectivity and walkability.

Local streets may use a variety of street designs including the following:

a) Traditional Local Street

The Traditional Local Street includes two twelve-foot wide traffic lanes, with parking, curb, gutter and sidewalk areas in addition to the traffic lanes within a sixty-foot wide right-of-way.

b) Special Local Street

The Special Local Street will be used in areas designated for planned development. These streets may be narrow and have rights-of-way as small as forty-eight feet wide. The travel ways (including parking) may be twenty-four to twenty-eight feet wide. Typically trees or landscaping will separate the vehicle travel-way from the pedestrian sidewalk.

3.3.6 Truck Routes

Truck Routes are designated in Chapter 10.36 of the City of Anderson Code. The following streets and parts of streets are designated as truck routes for the movement of vehicles exceeding a maximum gross weight of five tons:

1. State Highway 273
2. Interstate 5
3. Deschutes Road
4. North Street between State Highway 273 and the Sacramento River
5. Ventura Street
6. South Street between the westerly City Limits and State Highway 273
7. Balls Ferry Road
8. Riverside Avenue from I-5 to Latona Street
9. McMurry Street
10. Ox Yoke Road
11. South Street from State Highway 273 to Balls Ferry Road
12. Childress Street
13. Ganyon Street from McMurray to Childress Street
14. Briggs Street from State Highway 273 to Fairgrounds Drive
15. Fairgrounds Drive
16. Third Street from State Highway 273 to Missouri Street
17. Silver Street
18. Stingy Lane
19. Missouri Lane
20. Spring Gulch Road from Missouri Street to State Highway 273

3.4 Objectives, Policies and Implementation Program

Circulation Objective:

To ensure the development of a multimodal circulation system which will be both safe and efficient.

3.4.1 Streets and Roadways

A. Streets and Roadways Policies (SP)

SP-1 Provide a street system which will adequately serve homes, business, industry, recreation and other uses as they develop in accordance with the Land Use Plan. (Land Use Element)

SP-2 Continue to work with the Shasta County Regional Transportation Planning Agency (RTPA) to implement those programs appropriate for the City of Anderson.

SP-3 The City may develop standards for the provision of private streets.

Street Design Policies

SP-4 Provide an overall street pattern that has a functional relationship to land uses, accommodates future traffic volumes, and includes a wide variety of street types and designs to foster connectivity and walkability. (Land Use Element) (Health and Safety Element)

SP-5 Provide bicycle and pedestrian trails and facilities within and between residential areas. (Health and Safety Element)

SP-6 Promote modification of the Standards in Old Town Core, Special Planning areas and other suitable areas to allow special designs which promote smart growth and walkability. (Health and Safety Element)

SP-7 Coordinate design standards with area-wide construction standards to promote regional planning and efficiency.

Street System Policies

SP-8 Strive to maintain Level of Service (LOS) D as the minimum acceptable service standard for intersections during peak periods.

SP-9 Provide easy access for trucks and employees from employment centers to major through routes. Provide signage to direct trucks to appropriate truck routes. Direct non-local traffic onto collector streets and arterials. (Noise Element)

SP-10 Monitor, improve and enhance traffic safety and reduce the potential for traffic accidents.

SP-11 Maintain traffic speeds and volumes on neighborhood streets consistent with residential land uses through design and use of traffic calming measures.

SP-12 Provide adequate capacity (such as bike lanes and bus turn-outs) on collector and arterial streets to accommodate multi-modal travel within the City.

New Street Facilities Policies

SP-13 Address future roadway needs through both new road construction and management of existing and planned roadway capacity.

SP-14 Maintain an infrastructure fees and other funding programs adequate to assure sufficient financing and land to maintain and achieve prescribed Levels of Service.

SP-15 The City supports the concept of a new Interstate 5 interchange at the south end of the City to improve local traffic circulation if the findings of project-specific feasibility studies and environmental impact analysis conclude that a new interchange will be in the best interest of the City of Anderson.

SP-16 Review all new development proposals with public safety personnel to ensure adequate emergency access during construction and operation of the development.

B. Streets and Roadways Implementation Programs (SI)

Street Design Implementation

SI-1 Incorporate provisions for bicycle, pedestrian, and public transit modes during the planning and development review processes for new development and new roadways. (Health and Safety Element)

- SI-2 Encourage and promote car pools, vanpools, park and ride facilities, alternative work hours, employee shuttles, and other incentives to reduce single-occupant vehicle trips. (Air Quality Element)
- SI-3 Coordinate with local fire protection and law enforcement agencies on emergency response routes and plans. (Health and Safety Element)
- SI-4 Design residential streets to balance bicyclist and pedestrian safety with vehicular movement and safety to avoid creating hazards.
- SI-5 Various street designs, including traditional grid street designs, may be used and may include such traffic-calming features such as narrow streets, roundabouts and bulb-outs to encourage pedestrian-friendly development.
- SI-6 Adopt standards to allow narrow street sections in areas featuring grid systems and redundant parallel streets when combined with group parking and other safety features.

Street System Implementation

- SI-7 Maintain and develop a network of arterial and collector streets with proper consideration for existing and proposed circulation and land use patterns.
- SI-8 Monitor intersection Levels of Service at key reporting intersections.
- SI-9 Maintain a pavement management program, and identify and prioritize projects in the City's Capital Improvement Program to maintain the quality, safety and integrity of the City's roadway system for all types of traffic.

- SI-10 Street maintenance shall include regular cleaning and upkeep of bicycle routes to remove debris and alleviate poor pavement conditions that discourage bicycle riding.
- SI-11 Install and maintain truck route signing and marking to direct truck traffic onto designated truck routes.
- SI-12 Select safe traffic standards and provide consistent and comprehensive traffic safety law enforcement throughout Anderson. (Health and Safety Element)

New Street Facilities Implementation

- SI-13 Pursue improvements at I-5 Interchanges by coordinating with Caltrans and seeking funding from State and Federal sources.
- SI-14 Ensure that developers fund traffic impact studies that identify on-site and off-site effects and mitigations, and that they contribute appropriate funding to ensure that on-site and off-site improvements are constructed.
- SI-15 If it cannot be demonstrated prior to project approval that levels of service will be met, the City may consider the development based on payment of traffic impact fees targeted for the specific impacts.
- SI-16 In the event that a signalized intersection exceeds the applicable level of service standard, the City may approve projects if the City can establish appropriate conditions of approval and/or mitigation measures to address the service standard.

SI-17 Continue to work in partnership to address capacity and access issues along Interstate- 5.

3.4.2 Bicycle and Pedestrian Circulation

A. Bicycle and Pedestrian Circulation Policies (BP)

BP-1 Provide bicycle and pedestrian transportation areas on all arterial and collector streets. (Air Quality Element)

BP-2 Bicycle and pedestrian routes shall lead to schools, shopping centers, recreational areas and connect with regional bikeway systems. (Air Quality Element) (Health and Safety Element)

BP-3 Provide maximum opportunities for bicycle and pedestrian circulation on existing and new roadway facilities. (Air Quality Element) (Health and Safety Element)

BP-4 Enhance opportunities for bicycle and pedestrian activity in new public and private development projects. (Air Quality Element) (Health and Safety Element)

BP-5 Create a bicycle and pedestrian system that provides connections throughout Anderson and with neighboring areas, and serves both recreational and commuter users. (Air Quality Element) (Open Space and Conservation Element) (Recreation Element)

BP-6 Design new roadway facilities to accommodate bicycle and pedestrian traffic. Include Class I, II or III bicycle facilities as appropriate. Through the Design Review process, provide sidewalks to all roads, except in cases where very low pedestrian volumes and/or safety considerations preclude sidewalks. (Air Quality Element)

BP-7 Promote the provision of bike lockers and bike racks at park and ride lots, shopping areas and office buildings within the City. (Air Quality Element) (Health and Safety Element)

B. Bicycle and Pedestrian Circulation Implementation Programs (BI)

BI-1 Plan bicycle and pedestrian routes to form a continuous system to connect as many parts of the City as possible. Avoid dead-end trails. (Health and Safety Element)

BI-2 Coordinate City bicycle routes with Shasta County and State bicycle routes.

BI-3 Encourage greater support and use of bikeways and trails.

BI-4 During the site plan review process, require new development to incorporate design features that support bicycling and walking, particularly in those areas that could provide access to and between major destinations. This could include bicycle racks, lockers, showers and other support facilities; continuous sidewalks; an internal pedestrian circulation plan;

walkways for pedestrians and bicyclist between cul-de-sacs; and at least one major entrance adjacent to a sidewalk, wherever possible.

BI-5 Develop a comprehensive Bicycle and Pedestrian Master Plan, including design standards for bicycle and pedestrian facilities, evaluation of current bicycle promotion programs, analysis of bicycle and pedestrian accidents, and a capital improvement program to ensure adequate maintenance of bicycle and pedestrian facilities. (Recreation Element)

BI-6 Design trails to avoid unnecessary impacts to wetlands, drainages and sensitive species. (Open Space and Conservation Element)

- BI-7 Develop a strategic approach to pursuing State and Federal funding for bicycle and pedestrian improvement projects, working closely with neighboring jurisdictions.

- BI-8 Coordinate with local public and private schools to create well-designed Safe Routes to Schools, maps for bicyclists and pedestrians, and to provide adequate facilities to park bicycles.

3.4.3 Parking

Parking facilities are a necessary part of any circulation plan. Parking facilities should be landscaped and shared by multiple users.

A. Parking Policies (PP)

PP-1 Parking requirements shall ensure attractive, safe and adequate parking for each type of land use.

PP-2 Parking facilities should be used to encourage car-pools.

PP-3 Designs for shaded pedestrian connections should be included in all parking facilities.

B. Parking Implementation Measures (PI)

PI-1 Develop parking standards for each zoning district.

PI-2 Shared parking solutions between retail, office, residential and community uses shall be encouraged.

PI-3 Develop landscaping and lighting standards for parking areas.

PI-4 Parking access shall be adequately signed.

3.4.4 Public Transportation

Anderson's main public transportation is provided by the Redding Area Bus Authority (RABA). RABA provides the "Anderson Express" bus service between Redding and Anderson and also transportation within Anderson. RABA provides bike racks on all buses.

A. Public Transportation Policies (TP)

TP-1 Ensure that new roadways and facilities can accommodate public transit. (Air Quality Element)

TP-2 Ensure that new public and private development supports public transit. (Air Quality Element, Land Use Element)

TP-3 Encourage transit providers to improve transit routes, frequency, and level of service to adequately serve the mobility needs of Anderson residents, including those dependent on public transit in a cost-effective manner. (Air Quality Element)

B. Public Transportation Implementation Programs (TI)

TI-1 When reviewing development proposals, coordinate with public transit on appropriate standards for bus bays, bus turnouts, bus shelters, and other public transit amenities.

TI-2 Coordinate with public schools to promote access and roadway designs that support school bus requirements.

- TI-3 During the development review process, require provisions in site plans for public transit vehicle stops and turning maneuvers, where appropriate.
- TI-4 Explore potential locations for Park-and-Ride facilities within Anderson.
- TI-5 Use routing and transit programs to maintain the highest level of public transit service possible.

3.4.5 Railroad Service

The City of Anderson is served by the Union Pacific Railroad. The Railroad is an integral part of the City since it became a distinct community in 1872 with the successful negotiation with the Southern Pacific Railroad for the railroad right-of-way. Many changes in the railroad industry have occurred since then. Now the railroad provides only long-haul freight service to heavy industry.

A. Railroad Policy (RRP)

RRP-1 Maintain the highest level of rail service for economic development.

B. Railroad Implementation Program (RRI)

RRI-1 Assist businesses to work with Union Pacific Railroad to maintain sidings for freight service.

3.4.6 Utilities—Gas Lines, Power Lines, Fiber Optic Cable

According to the General Plan Guidelines “The circulation element is not simply a transportation plan. It is an infrastructure plan addressing the circulation of people, goods, energy, water, sewage, storm drainage, and communications.” In this Plan the water and waste water treatment systems are addressed in the Health and Safety Element. The storm drainage issues are addressed in the Open Space and Conservation Element.

In Anderson, gas and electrical power are supplied by the Pacific Gas and Electric Company (PG&E). New development must be coordinated with PG&E to insure that the required infrastructure can be made available in a timely and efficient manner.

Communication lines are supplied by AT&T (telephone) and Charter Communication (cable television) and wireless communication systems are also available.

A. Utility Policy (UP)

UP-1. Ensure that utilities are available for new development.

UP-2. Encourage state-of-the-art electronic communication connections for all new development.

UP-3. Encourage co-location of wireless communication facilities.

B. Utility Implementation (UI)

UI-1. Coordinate development planning with utility providers.

UI-2. Review utility plans for large projects to ensure connectivity to gas, electricity and electronic communication.

UI-3. Allow co-location of wireless communication facilities where sites are available.

City of Anderson General Plan

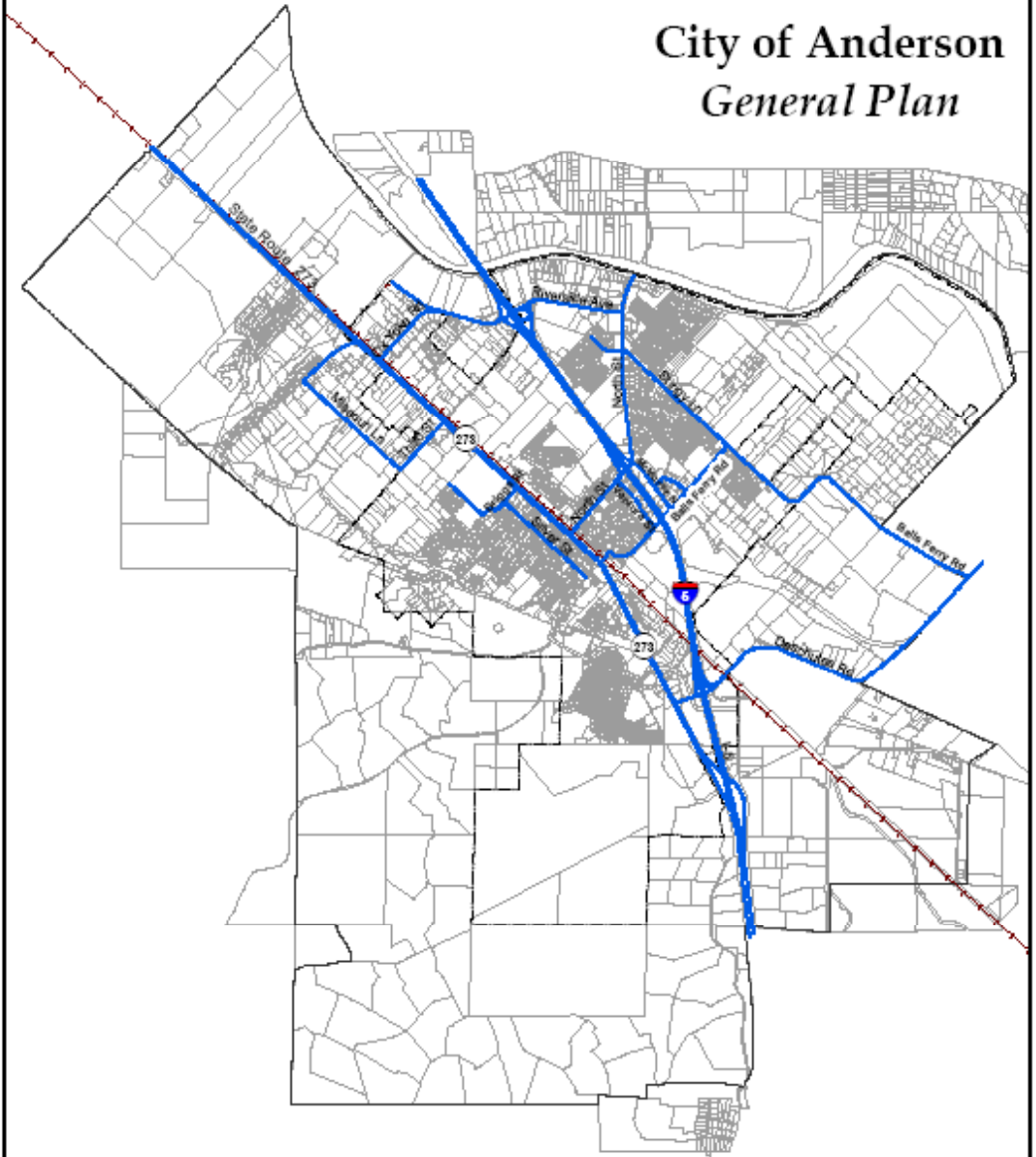
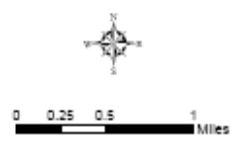


Figure 3.5.2
Truck Routes

September 2006



LEGEND

- Truck Routes
- Railroad
- City Limit
- General Plan Area

City of Anderson General Plan

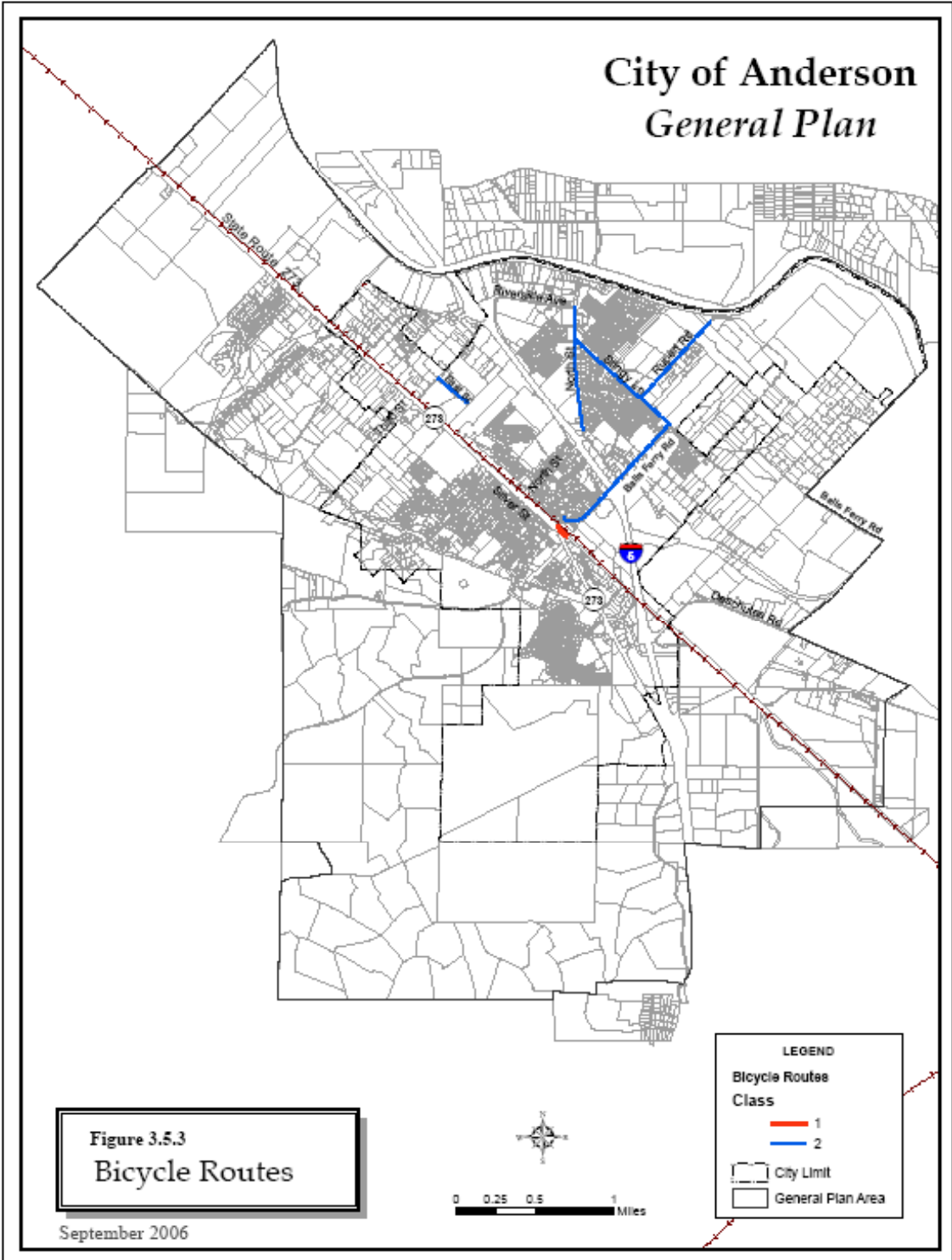


Figure 3.5.3
Bicycle Routes

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3.6 Right-of-Way Requirements

Design Item	Express-way	Major Arterial	Major* Arterial Option	Collector	Subcollector (Local)	Local Streets	Cul-de-sac	Indust./ Business Park	Frontage Road	
ROW width	110-120	96	84	84	64 or 60	56-60	56-60	64	45-60	
Pavement width (curb to curb)	72	76	72	64	44 or 40	32-40	36-40	44	32-40	
Median width 3	18	12	10	10	--	--	--	--	--	
Curb type	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical or rolled ⁴	Vertical or rolled ⁴	Vertical	Vertical	
Sidewalk width	--	5-10 ¹	5-10 ¹	5	5	5	5	5	5	
Maximum grade	7%	7%	7%	8%	12%	12%	12%	8%	8%	
Minimum centerline radius of curves	1000	1000	1000	800	500	200	200	300	300	
Minimum tangent between adjacent curves	100	100	100	100	²	²	²	²	²	
Minimum cul-de-sac radius	--	--	--	--	--	--	--	50	50	--
Maximum weekday traffic	50,000	28,000	28,000	12,000	8,000	3,000	1,000	4,000	--	
Property line radii at intersections	40	40	40	30	30	20	20	30	30	
Design speed	55-65	45-55	45	35	30	25	25	25	25	

* Certain major arterials may be reduced to eighty-four-foot rights-of-way with special provisions for public service easements and special intersection turn lanes, bus stops, and bike lanes.

¹Varies with type/density of development.

²Tangent to be determined by the City Public Works Director.

³Medians may be established in any street subject to approval by the planning commission, depending on whether it is also used for turning purposes.

⁴Rolled curb only in single-family or duplex areas.