*Transportation Element*

# INTRODUCTION

## Purpose of the Transportation Element

The purpose of the Transportation Element is to address the motorized and non-motorized needs of the City of Ephrata for the next 20 years. The Transportation Element has been developed in accordance with the County-Wide Planning Policies, and has been integrated with all other planning elements to ensure consistency throughout the comprehensive plan. The Transportation Element specifically considers the location and condition of the existing traffic circulation system the cause, scope, and nature of transportation problems; the projected transportation needs; and plans for addressing all transportation needs while maintaining established level of service standards.

The transportation element has three major sections:

- Inventory and Analysis of the Existing Transportation System.
- Future needs and alternatives of future transportation needs.
- Goals, objectives and policies for future transportation.

## What Does the Growth Management Act Require?

The Growth Management Act requires the Transportation Element contain the following sub-elements:

- Land use assumptions used in estimating travel.
- An inventory of air, water, and land transportation facilities and services, including transit alignments, to define existing capital facilities and travel levels as a basis for future planning.
- Level of service standards for all arterials and transit routes to serve as a gauge to judge performance of the system. These standards should be regionally coordinated.
- Specific actions and requirements for bringing into compliance any facilities or services that are below an established level of service standard.
- Forecasts of traffic for at least ten years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth.

- Identification of system expansion needs and transportation system management needs to meet current and future demands.
- An analysis of funding capability to judge needs against probable funding resources.
- A multi-year financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road, or transit program and for public transportation systems.
- Demand-management strategies.
- The Transportation plan must be consistent with all other elements of the Comprehensive Plan and specifically the Land Use Element.

**Concurrency-**This element contains the city's plan to provide specified levels of transportation service in a timely manner. The levels of service (LOS) standards that are adopted in this plan will be maintained through upkeep of the existing circulation system and expansion of transportation services where needed. The city has adopted Link (A-F) Level of Service standards for the arterials that handle the most significant volume of traffic in the city. The process of establishing level of service standards requires the city to make quality of service decisions explicit. As specified in the Growth Management Act new developments will be prohibited unless transportation improvement or strategies to accommodate the impacts of development are made concurrent with the development. Such improvements and strategies will be in place or financially planned for within six years of development use.

## County-wide Planning Policies

The adopted County County-Wide Planning Policy calls for all county jurisdictions to coordinate planning efforts, including provision of current and future utilities, to address future growth in a coherent manner that leads to more efficient delivery of transportation facilities and services. Generally the County-wide planning policies state:

- A County-wide transportation plan should be developed pursuant to the GMA that is consistent with the land use element of the comprehensive plan.

- Transportation development and improvements should be concurrent with future commercial, residential and other land

use development.

- The County-wide transportation planning effort should produce a methodology to evaluate the impact of development proposals and to identify necessary transportation improvements.

- County-wide transportation facility standards should be established by the County.

- A County and regional review process should be established to coordinate transportation programming decisions and to ensure consistency with the regional transportation plan. Transportation priority programming methods should be used to establish the six-year transportation plan.

- The finance element of the transportation plan should show the ability of the City to fund existing and proposed transportation improvements in the unincorporated areas of the County.

- The City should strive through transportation system management strategies to optimize the use and maintenance of existing roads in order to minimize the construction costs and impacts associated with roadway facility expansion.

- The City should establish consistent roadway standards, level of service standards and methodologies, and functional classification schemes to ensure consistency throughout the City and surrounding county.

- State, regional, or county facilities that generate substantial travel demand should be sited along or near major transportation and/or public transit corridors.

- The City should seek to foster a transportation system that is planned, balanced and compatible with land use densities so that adequate mobility and movement of goods and people can be maintained.

- **Quad County Regional Transportation Plan**

- In addition to the GMA, comprehensive plans should be consistent with adopted regional policies. In June 1994, the Quad County Regional Transportation Planning Organization

(RTPO) Regional Transportation Plan was adopted. The four counties and all cities within those counties comprise the RTPO. Policies in the Quad-County Regional Transportation Plan include:

## ***General Transportation Issues***

- Support economic growth and vitality;
- Emphasize movement of goods and people rather than movement of vehicles;
- Wherever possible, preserve existing and reserve abandoned rail lines in accordance with the Washington State Rail Transportation Plan;
- Consider the most cost-effective modes of transportation;
- Apply minimum standards for operation conditions, classification schemes, and performance measures; and
- Identify and implement strategies to resolve constraints to intermodal connections.

## ***Multi-jurisdictional Coordination***

*Ensure that transportation decisions and improvements are coordinated across all affected agencies and jurisdictions; and*

Communicate with the private sector to ensure that transportation decisions that impact private facilities are coordinated with the affected industries.

## ***System Capacity and Improvement***

Focus on minimizing inefficient routing and lowering travel time;

Whenever possible and practical, improve existing facilities rather than provide new facilities except where those improvements are demonstrated to have a lower cost and a higher benefit;

Encourage major employers, activity centers, and others to establish programs for ridesharing and other transportation demand management (TDM) systems; and

Encourage consolidation of freight facilities. Improve safety and capacity of roadways while retaining aesthetic features on tourist roads.

## ***Roadway***

Match available funding with necessary improvements;

Higher classed facilities receive higher priorities; and

Ensure consistency of roadway classification system.

## ***Public Transportation***

Improve mobility for population segments dependent on public transit. Provide viable alternative to Single Occupancy Vehicle (SOV) travel.

## ***Land Use***

Support urban growth boundaries, urban nodes, residential centers and employment centers;

Identify and encourage preservation of transportation corridors; and

Implement transportation improvements that enhance improvement of inadequate regional infrastructure.

## ***Environmental Concerns***

Solutions to all identified transportation issues must consider their environmental ramifications.

### Grant County Comprehensive Transit Plan

The Grant County Public Transportation Benefit Area (PTBA) was established in 1993 to assess the need for, and feasibility of, establishing a transit operation in Grant County. The Grant County PTBA encompasses all of Grant County and operates independently from other local government. Its only function is to provide public transportation for citizens within Grant County.

In 1993, Weslin Consulting Services, Inc., prepared a Comprehensive Transit Plan that identified system needs, developed and evaluated alternatives for providing public transit, included a funding and management plan, and made policy recommendations for the system. In 1995, Grant County voters approved a four-tenths of one percent sales tax to support the implementation of the Grant County Transit Authority.

The Grant County Comprehensive Transit Plan and the Grant Transit Authority Transit Development Plan, 1998-2004, and all updates to the plan, are hereby incorporated by reference into this Comprehensive Plan.

## EXISTING CONDITIONS

The City of Ephrata and Urban Growth Area (UGA) are served by State Highways 28, 282 & 283. State Route 28 connects to the City of Wenatchee which is located 55 miles west of Ephrata. State Route 283 provides access to Interstate 90 at the Town of George located 20 miles to the southwest. State Route 282 provides access to the region's major north-south highway, SR 17, four miles east of Ephrata. This provides a connection to the City of Moses Lake (16 mi) and I-90 (22 mi) to the southwest. In addition, the Burlington Northern Santa Fe Railroad runs through Ephrata providing direct freight and passenger access to points between Chicago and Seattle and includes a siding to service the Port of Ephrata.

The state highway system carries high volumes of traffic to and through the Ephrata area. These highways provide access to major state and national recreation facilities a short distance from the City of Ephrata at Sun Lakes, Banks Lake, Grand Coulee Dam and Lake Roosevelt. In addition, the State Highways serve as major arterial streets for local traffic circulation within the City and UGA as shown on the preceding **FUNCTIONAL CLASSIFICATION** map.

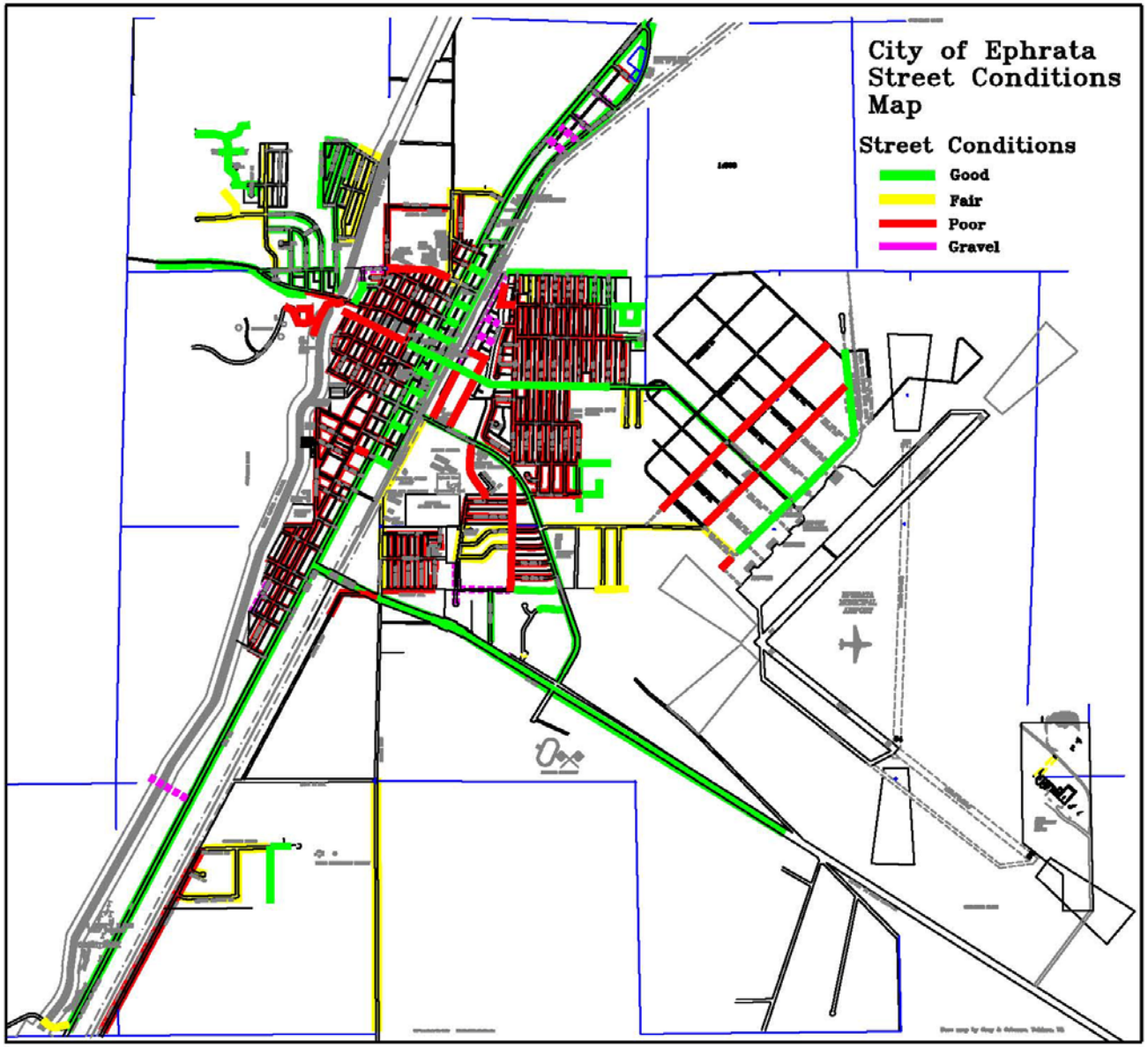
## EXISTING CONDITIONS

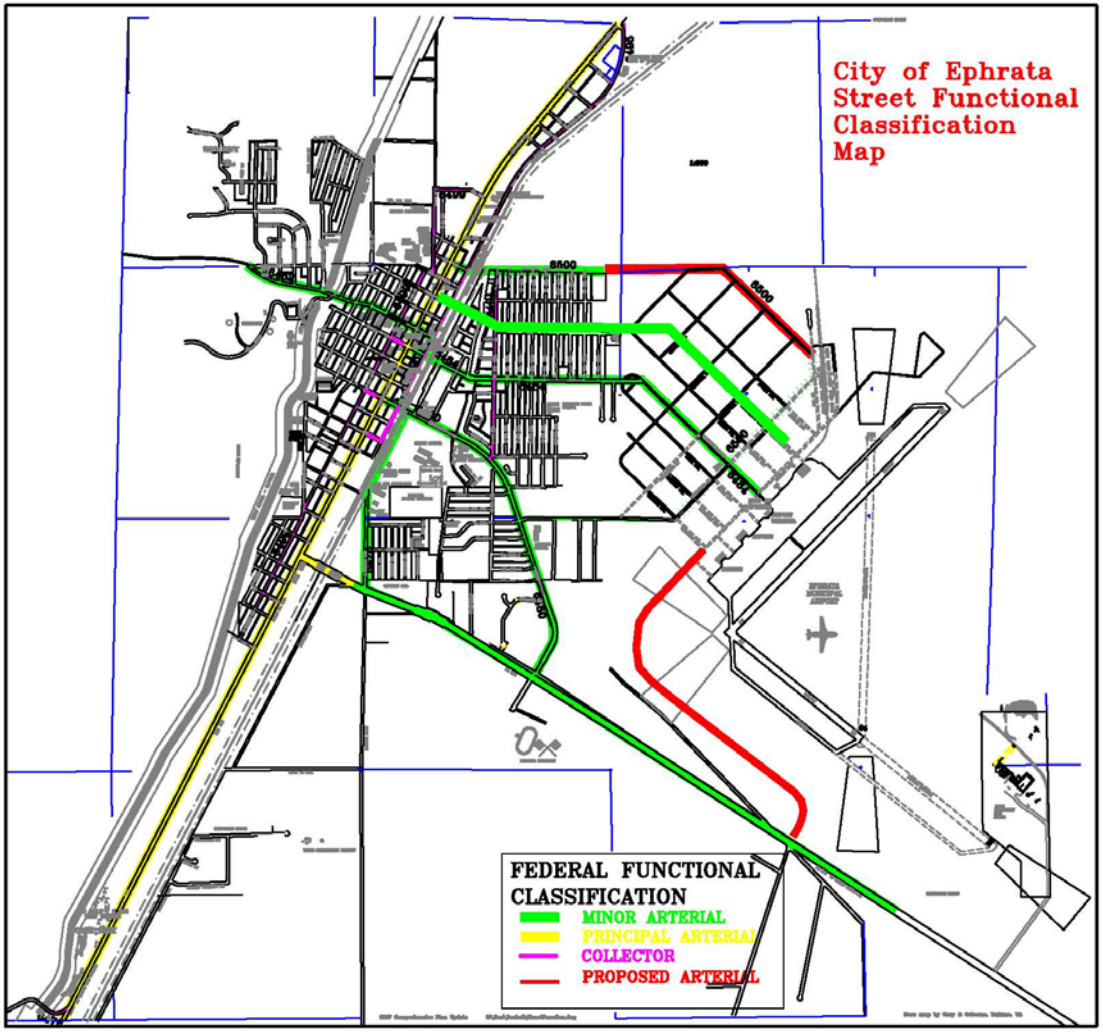
**Bridge System-**The bridge system in Ephrata is limited.

The city is located in an arid area without permanent creeks or rivers requiring bridge crossings. The area drainage system does not have permanent flowing streams. The city's main water feature is the U.S. Bureau of Reclamation's large West Canal. This main irrigation canal runs north-south through the western part of the City and the UGA. The large bridge at the culvert/siphon crossing of the main canal is the only access to the north western section of the city, (Grandview Heights). A second bridge crossing the canal is in the Southwest section of town. This bridge crosses outside the city limits to Ephrata Well #4 and to a few relatively undeveloped properties. The bridge replaced a one lane wooden bridge built at the time of the canal construction and is sufficient in size for normal city street traffic.

**Roadways-**Traffic Circulation (local)

Local automobile traffic is directly related to land uses. The existing land uses create current traffic patterns resulting from the circulation of autos, trucks, buses, bikes and pedestrians from home to work, shopping, schools and other destinations. Traffic moves between commercial, industrial and other developments within the urban area. In addition, traffic from outside the area enters and circulates on the local street system to access the existing land uses.


City of Ephrata
Street Conditions
Map
Street Conditions
Good
Fair
Poor
Gravel


City of Ephrata
Street Functional
Classification
Map
FEDERAL FUNCTIONAL
CLASSIFICATION
MINOR ARTERIAL
PRINCIPAL ARTERIAL
COLLECTOR
PROPOSED ARTERIAL

Local development in small communities tends to take place where there is easy access to existing highway facilities to handle traffic circulation within the community. The City of Ephrata originally developed along Basin Street (State Route 28) and the Burlington Northern Railroad that runs through the center of the city in generally a north-south direction. Later, extensive development occurred in the northeastern area of the City after the airport was constructed by the US Military for training bomber pilots during World War II. Division Street was constructed as a major arterial to access the Air Base. Development quickly occurred along this new street and other areas adjacent to the Air Base which survived the closure of the military facilities and decline of commercial airport activities.

The preceding **Functional Classification** map illustrates the street system that exists to handle the movement of people and goods traffic within the City of Ephrata and UGA. State Route 28 (Basin Street) is a heavily traveled tourist and recreation route through the City's Downtown area. This street also carries large volumes of local traffic that circulates along the concentrated commercial core of Ephrata.

The residential area in the western half of the City is developed adjacent to the commercial district along Basin Street (SR 28) with two-thirds of the area's residents living in the northwest part of this section of Ephrata. The residential traffic generated in the western half of the City gains access to Basin Street along its entire route. However, the traffic is much heavier in the northern quarter of the City due to the concentration of commercial, government and school facilities within this area.

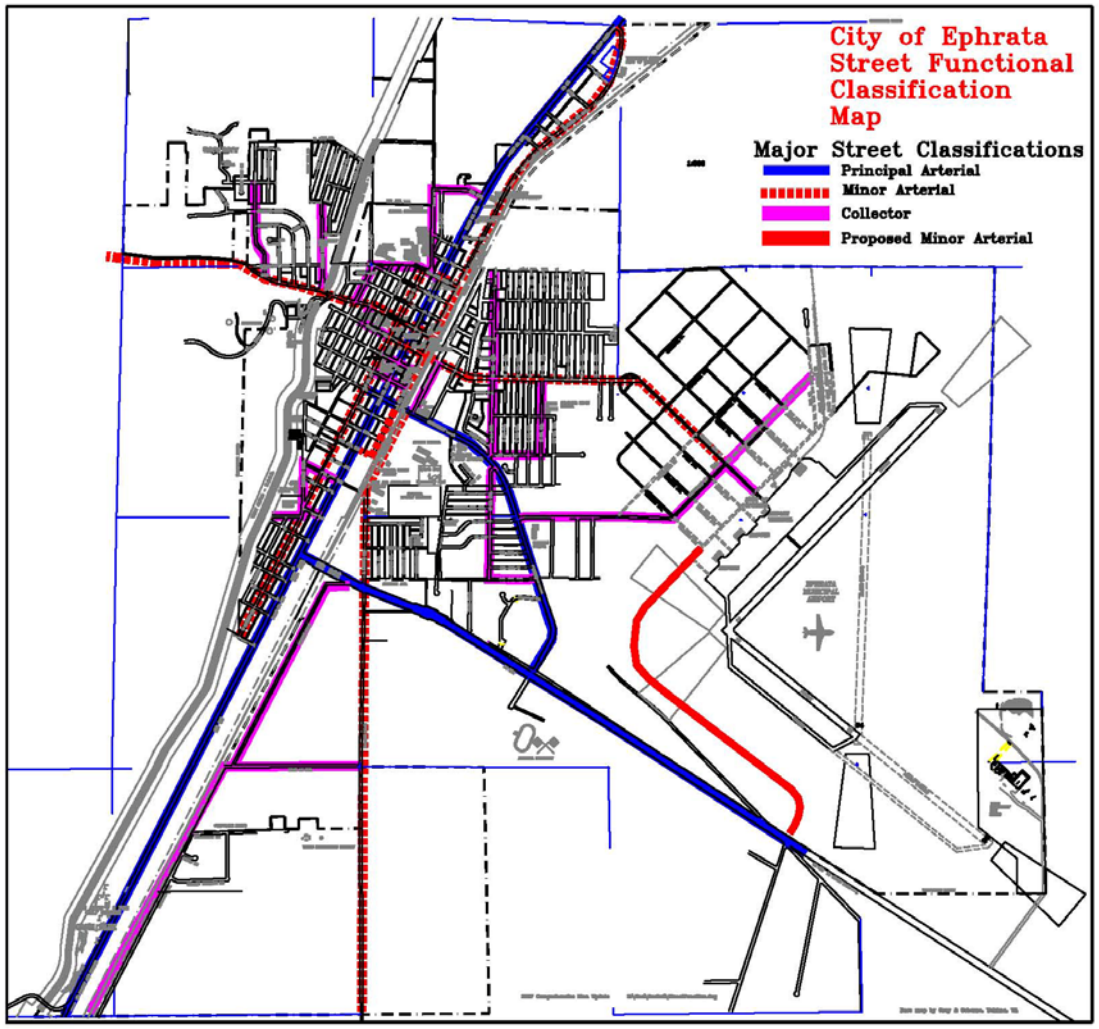
The City of Ephrata and UGA is not divided by a major east-west City Street, County Road or State Highway. There are several east-west City Streets and County Roads that run basically half way across the UGA, but, none connecting for a complete route to carry traffic through the City and UGA. State Route 282 enters the southeastern section of Ephrata from the east and ends at Basin Street west of the overpass for the BN Railroad. Sage Brush Flats Road comes into the northwest section of the City into 1st Street and the downtown area to an end at Alder Street adjacent to the railroad tracks. Division Street extends from the Airport Terminal on the east side of the City into the downtown area and ends. Southeast Blvd./Nat Washington Way extends from the downtown area in a southeast direction to SR 282 on the outskirts of the City between existing development and the airport.

The **Arterial & Collector System** map identifies the backbone system of arterials and collectors for the existing system of State Highways, County Roads and City Streets which carry the majority of traffic circulating within the Ephrata UGA.

Washington State Department of Transportation is responsible for Highway 28 and 282 and coordinates with the city at intersections with city streets. Grant County and Ephrata work jointly to maintain roads within existing areas of developed Urban Growth Areas.

## Street Conditions

There are approximately 40.43 miles of city streets in Ephrata. There are 38.62 miles of paved streets and 1.81 miles of gravel streets within the city limits. A detailed street inventory was completed in 1989 (Appendix F) and is updated on an annual basis. The standard city street has a 36 foot paved surface on 60 feet of right-of-way. The surface paving is 2 ½ " of Asphaltic Concrete Class B. Many of the main arterials have 80 feet of right-of-way with 56 to 60 feet of pavement.


City of Ephrata
Street Functional
Classification
Map
Major Street Classifications
Principal Arterial
Minor Arterial
Collector
Proposed Minor Arterial

In the past, the City of Ephrata has made major efforts towards maintaining the City Streets. A program was carried out for many years to seal cracks and seal coat the surface of all streets over a seven year cycle which resulted in good quality street facilities throughout the City. The Washington State Department of Transportation has maintained and upgraded the state highway facilities and Grant County has responded to the challenge of maintaining the county roads serving the Ephrata area.

During the past few years street funds were directed to other street projects and the City has not been able to keep up its annual city street maintenance program. This has resulted in serious deterioration of some streets that the City will not be able to remedy with the resumption of the regular maintenance program that was so successful in the past. In addition, new development is generating additional traffic on many streets which will result in more rapid deterioration if the streets are not repaired very soon.

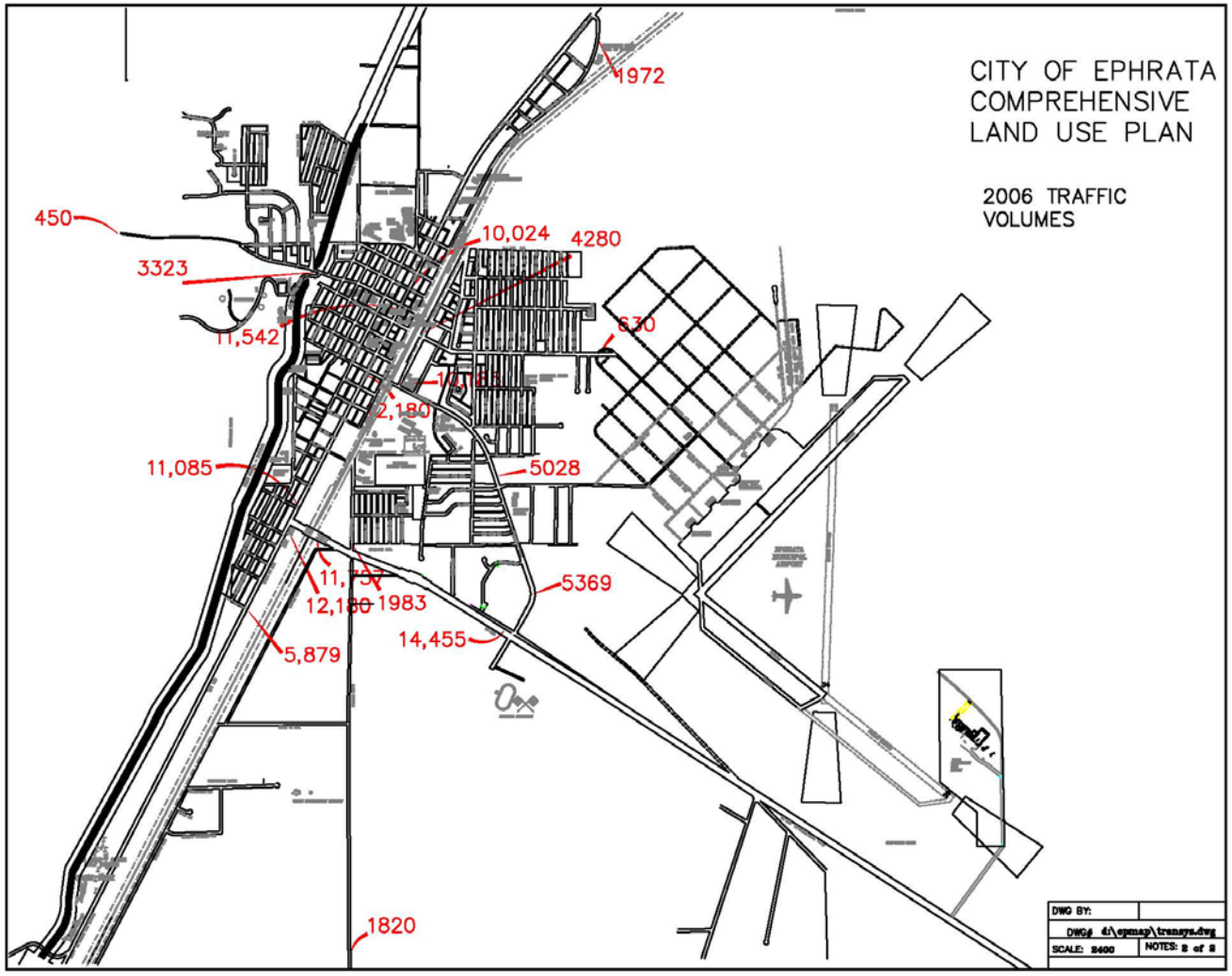
Ephrata is currently working on a Street and Utility maintenance program that is intended to replace aging sewer and water lines throughout the City. As a side benefit to this utility service upgrade, the city will repair and or replace the existing street improvements as the underground facilities are upgraded. The City is also working jointly with the Port of Ephrata to purchase and maintain crack filling equipment for continued maintenance of all roads and airport facilities once the improvements are made.

A general physical condition survey of the Ephrata and UGA street, road and highway system is shown on the following **Street Conditions** map. The street conditions have been rated simply as GOOD, FAIR and POOR based upon physical appearance during a "windshield survey". This assessment does not include any detailed evaluation of the physical characteristics or construction quality of facilities. A transportation planning project is included in the proposal to update the existing streets.

A segment of any facility that is new, recently paved or the condition does not warrant inclusion in a maintenance project for the current 6-year (short-range) Street Improvement Program is rated as GOOD. However, this rating does not preclude the possible need to upgrade or improve a facility to accommodate higher traffic volumes or heavy truck traffic.

The segments of facilities where the pavement is beginning to deteriorate, but, can be saved with minor repairs, filling cracks and seal coating the surface have been rated as FAIR on the **Street Conditions** map.

Where a segment of any facility has deteriorated beyond saving with minor repairs and maintenance it is rated POOR. Also included in this classification are a few dirt or gravel streets that have never been developed with paving. This classification indicates that the facility will require a major repair or resurfacing project to restore it to a safe/efficient traffic carrying facility. It should be noted that the majority of the system rated as POOR is rapidly deteriorating and needs to be included in a maintenance project within the next year or two to avoid major repairs or a complete repaving project. There are only a few streets in this category that might hold up long enough to be include at the end of a "seven year" maintenance program. The costs of these projects are much higher than the City's normal maintenance budget can handle. However, planning should continue in order to develop realistic cost estimates and identify financial resources to pay for restoration of these street facilities.


CITY OF EPHRATA
COMPREHENSIVE
LAND USE PLAN
2006 TRAFFIC
VOLUMES
1972
450
10,024
4280
3323
630
11,542
2,180
11,085
5028
5369
1983
14,455
5,879
1820

**Traffic Volumes-**There are no other north-south streets extending across the City separating local traffic from the highway travelers, resulting in relatively high volumes of traffic circulating on Basin Street. Ephrata area traffic volumes are shown on the preceding **Traffic Volumes** map. The area with highest volumes is in the downtown core area of the City. There are 12,000 vehicles per day on Basin Street (SR28) in downtown Ephrata where the street has three (3) lanes and traffic signals to manage this high volume of traffic. The **Traffic Volumes Map** illustrates the movement of traffic into and through the City with the majority of traffic funneled to Basin Street (SR 28) by the existing street, road and highway system.

The following traffic volume data was provided by the Washington State Department of Transportation for the Ephrata area. This data shows that significant increases in traffic have been taking place since 1989. The following Table, **EPHRATA AREA ADT 1996-2000** summarizes the Average Daily Traffic (ADT) volumes on SR 28 and the ADT for SR 282.

| **EPHRATA AREA ADT 1994-2006** | | | | | | |
|---|---|---|---|---|---|---|
| SR 28 | **1996** | **2000** | **2002** | **2006** | | |
| Before Martin Rd | 4900 | | | | | |
| After Martin Rd | 5600 | | | | | |
| After Oasis Park | 5500 | | | | | |
| After 18th Ave | 7100 | | | | | |
| Before SR 282 | 8300 | | 10141 | 10632 | | |
| After SR 282 | 9300 | | 10124 | 11085 | | |
| Before Nat Washington Way | 11000 | 13325 | 10150 | 12180 | | |
| After Nat Washington Way | | 12496 | 10124 | 12070 | | |
| Before W Division | | 11666 | 10135 | 11810 | | |
| After W Division | 11000 | 12568 | 10145 | 11542 | | |
| After 1st Ave NW | 9700 | 9632 | 10217 | 10024 | | |
| Before B NW | 5700 | | | | | |
| After B NW | 6000 | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **SR 282** | | | | | | |
| After SR 28 | 4400 | | | | | |
| Before Dodson Rd | 4400 | | | 11757 | | |
| Before Nat Washington Way | 4400 | | | 14551 | | |
| After Nat Washington Way | 4100 | | | | | |
| Before Rd. A SE | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Nat Washington Way** | | | | | | |
| North of SR282 | 1357 | 3998 | 5273 | | | |
| North of 5th Ave SE | 2346 | | 4927 | | | |
| East of SR28 | 5367 | | 5835 | 10185 | | |
| | | | | | | |
| **Division St.** | | | | | | |
| East of SR28 | 5423 | | | | | |
| East of D St. NE | 4129 | | | | | |
| | | | | | | |
| **Alder Street** | | | | | | |
| East of SR28 | 1108 | | 1972 | | | |
| | | | | | | |
| **1st Avenue NW** | | | | | | |
| At West Canal | 2366 | | | | | |
| City Limits | 529 | | | | | |
| | | | | | | |

**Traffic Safety-** Traffic accidents in the Ephrata area have declined from 112 in 1984 to 63 in 1993. The following table shows traffic accidents that were reported within Ephrata since 1984 (1994-1996 Data not available). There have only been 2 fatalities reported during this period, one in 1996 and another in 1997 but no further fatalities since 1997. Accidents with injuries are a relatively small percentage of the total accidents reported in Ephrata. The Ephrata Police Department activated the Spillman system in 1997 which allowed for better tracking of the accidents reported.

## EPHRATA TRAFFIC ACCIDENTS

**Year Accidents Injuries Fatalities**

| | | | |
|---|---|---|---|
| 1984 | 112 | 17 | 0 |
| 1985 | 100 | 17 | 0 |
| 1986 | 91 | 12 | 1 |
| 1987 | 79 | 26 | 1 |
| 1988 | 101 | 25 | 0 |
| 1989 | 79 | 33 | 0 |
| 1990 | 54 | 8 | 0 |
| 1991 | 68 | 20 | 0 |
| 1992 | 71 | 23 | 0 |
| 1993 | 63 | 14 | 0 |

| **Year** | **Accidents** | **Injuries** | **Fatalities** |
|---|---|---|---|
| 1997 | 170 | 15 | 0 |
| 1998 | 185 | 14 | 0 |
| 1999 | 199 | 16 | 0 |
| 2000 | 241 | 23 | 0 |
| 2001 | 207 | 23 | 0 |
| 2002 | 217 | 27 | 0 |
| 2003 | 207 | 32 | 0 |
| 2004 | 186 | 21 | 0 |
| 2005 | 253 | 27 | 0 |
| 2006 | 219 | 21 | 0 |

## PUBLIC TRANSPORTATION

**Railway Service-** Amtrak Railway Passenger service is available in Ephrata with two daily departures, eastbound at 9:53 p.m. and

westbound at 4:25 a.m. A train station was constructed by the City to serve as a multi-modal facility to accommodate both train and bus passengers for the area. The Chamber of Commerce Office is located in this facility and serves as agent for information and ticket sales.

**Mass Transit-** A Yakima based non-profit transportation public transit company, People for People, provides transportation for senior citizens, physically disabled citizens, and those receiving medical coupons. With a 24 hour reservation, People for People will transport passengers to their desired destination and return. However, passengers using medical coupons can only be transported to and from medical appointments.

Greyhound Bus Lines arrives and departs twice daily in Ephrata. One route departs towards Quincy, Wenatchee and across Stevens Pass to Seattle. The eastbound Greyhound route goes to Spokane.

Grant Transit Authority has gone from the drawing board into use by all cities within Grant County. From a demonstration project in the 1990's it is now a full fledged transportation service connecting all cities with transportation service multiple times a day. Grant Transit provides rides from close proximity to all major job providers and public services to each city as well as many locations within all the cities. There are also a few links internally with Chelan/Douglas County's LINK commuter transit system.

**Pedestrian/Bicycle Trails-** Ephrata has worked hard to develop trails throughout the City. As the major arterials which include Alder Street, Division Street, Nat Washington Way and many other major streets and avenues have been upgraded bike trails and sidewalks have been included in the construction projects. A trail connecting several streets at the airport and a new path along the hills on the west side of town will increase the amount of paths immensely. The Ephrata Trails committee continues to look for funding sources and the best locations to increase the amount of trails. The most recent trail that is nearing completion of construction plans will travel from inside the city out into the urban growth area. The corner stone of the pedestrian trail system was completed with the downtown park and the pedestrian link it established in the city center.

**Port of Ephrata Recreational Airport** – Located inside the corporate limits of the City of Ephrata, the Ephrata Airport is maintained and operated by Grant County Port District #9. The airport provides many recreational opportunities for small airplane pilots and is the base for

the Seattle Glider Club. Throughout the Spring, Summer and early Fall months, the port is bustling with activity from the glider pilots, aerial acrobat pilots and general aviation pilots. Designated as a general aviation airport, the port has one main runway and one crosswind runway capable of handling up to Gulfstream IV aircraft.

## FUTURE NEEDS & ALTERNATIVES

The Citizen Advisory Committee and City Council prepared a Set of Transportation Goals and Policies for development of transportation facilities in the future to serve the citizens of the City and UGA. In order to accomplish this, Goal, 15 Goals were established and policies and programs were prepared for each goal.

The Transportation Plan Element of the Comprehensive Plan has been prepared to satisfy the GOALS, OBJECTIVES AND POLICIES developed in the citizen participation process and adopted by the City Council (immediately following this section. Further goals, objectives and policies have been added during annual updates and are included beginning on page TR-39.

The following Goals, Objectives and Policies were prepared by the Citizen Advisory Committee, and approved by the City Council for use in preparing this Transportation Element of the Comprehensive Plan.

**GOAL: To provide an effective multi-modal transportation network with adduced capacity to meet, at the adopted level of service, the demand for travel in the city.**

## PROVIDE EFFICIENT AND SAFE TRANSPORTATION

**Objective A:** The city will provide safe, convenient, and efficient transportation for all residents and visitors to the city. This will include improvements to existing facilities as well as extensions of transportation to new developments.

**Policy A.1:** The city will develop and enforce a Truck Route Ordinance where needed and maintain appropriate signage for the truck route to ensure compliance.

**Policy A.2**:The city will examine opportunities to expand the County's Public Benefit Transportation Area to provide regional transportation through cooperation with regional transit systems.

**Policy A.3**:By 1995, the city shall amend and adopt design criteria for a Landscape Ordinance and a Signage Ordinance for new roadways.

**Policy A.4**:The city will review designs of parking elements on site plans submitted through the development review and construction processes.

**Objective B:** By 1996, the city of Ephrata will develop a plan to provide avenues for non-motorized travel.

**Policy B.1:**Within one year of plan adoption, the city will formulate and adopt development regulations requiring developers to provide pedestrian trails or sidewalks in conjunction with new construction projects.

**Policy B.2:**The city will continue to incorporate regular and routine consideration of bicycles in accordance with the Washington Department of Transportation, and the American Association of State Highway and Transportation Officials (ASSHTO) standards in all transportation improvements.

**Policy B.3:**The city will coordinate and install sidewalks at locations requested by the school district within two years of identification.

**Policy B.4:**Where appropriate, the city will install new sidewalks in pedestrian corridors considered by the city to be high priority (i.e., parks and areas used by elderly or disabled persons) within two years of identification.

## MAINTAIN LOW ACCIDENT RATE

**Objective C:** By the city will seek to maintain the low accident rate as growth occurs.

**Policy C.1:**The city will identify specific high accident intersections on both the collector and arterial system within two years of plan adoption.

**Policy C.2:**By the end of 1997, the city will continue to provide maintenance activities related to traffic control devices and roadway

material within guidelines established by the Department of Public Works.

**Policy C.3:** The city will maintain needed traffic data such as traffic counts and accident data to support studies, planning and operational activities for the Department of Public Works.

**Policy C.4:** By 1997, the city will conduct a study to identify standards that enhance the safety of pedestrians and motorists in regard to sidewalk design and maintenance, lighting requirements, signs, and access to properties.

## PROVIDE ADEQUATE TRANSPORTATION SYSTEM

**Objective D:** The city will insure that the transportation system is adequate to serve all existing and future land uses. This will require coordination with the Land Use Plan and with the transportation plans of adjacent jurisdiction. In addition, to ensure that a consistent level of service is provided, the city will develop a concurrency management system, will explore alternatives for demand management, and will secure adequate financing for transportation.

**Policy D.1:** The city will review all development proposals, rezoning and vacating petitions, variance request, subdivision plats, and commercial construction site plans to ensure coordination with the Transportation Element.

## COORDINATE TRANSPORTATION SYSTEM

**Objective E:** By the end of 1997, the city will coordinate review of all future proposed roadway corridors with the county, with respect to critical areas land to minimize adverse impacts.

**Policy E.1:** New roads will be routed to avoid traversing publicly owned natural preserves, parks and recreation areas, significant cultural resources, and areas identified as critical wildlife habitat, except in cases of overriding public interest.

**Policy E.2:** All road construction projects will meet or exceed the minimum requirements for storm water runoff.

**Policy E.3:** Within three years of plan adoption, the city will adopt an official right-of-way map identifying future right-of-way needs based

on the Transportation Element. The city will coordinate the selection of the criteria used to establish future right-of-way across sections of the state highway system with the Washington Department of Transportation.

## ESTABLISH AFFORDABLE LEVEL OF SERVICE

**Objective F:** By 2012, provide a cost affordable Level of Service for the roadway network of the city of Ephrata.

**Policy F.1:** The city will maintain an annually updated listing of analyzed and prioritized road improvement needs based on the Transportation Element.

**Policy F.2:** The city will use the Link (A-F) Level of Service standards as minimum criteria for the quality of service provided at peak hours for roadway segments on all four arterials that handle significant levels of local traffic. The evaluation of Level of Service will be conducted using the ratio of "peak hourly demand volume" to "peak hourly capacity."

> LOS A: Primarily free-flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions. **Volume/Capacity Ratio less than or equal to 0.60.**
>
> LOS B.: Reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions. **Volume/Capacity Ratio greater than or equal to 0.60 and less than or equal to 0.70.**
>
> LOS C: Stable traffic flow operations. However, ability to maneuver and change lanes may be more restricted than in LOS B, and longer queues an/or adverse signal coordination may contribute to lower average travel speeds. Motorists will experience appreciable tension while driving. **Volume /Capacity Ratio greater than 0.70 and less than or equal to 0.80.**

LOS D: Small increases in traffic flow may cause substantial increases in approach delays and, hence, decreases in speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combinations of these. **Volume /Capacity Ratio greater than 0.80 and less than or equal to 0.90.**

LOS E: Significant delays in traffic flow operations and lower operating speeds. Conditions are causes by some combination or adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing. **Volume /Capacity Ratio greater than 0.90 and less than or equal to1.00.**

LOS F: Traffic flow operations at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse signal progression is frequently a contributor to this condition. **Volume /Capacity Ratio greater than 1.00.**

**Policy F.3:** By 1995, utilize development phasing in the urban growth area to assure consistency with the associated Level of Service standard by year or with the capacity of the existing and programmed roadway network as adopted by the town.

**Policy F.4:** Upon the annual date of adoption, the city's concurrency management system will be revised as part of the annual review and amendment of the comprehensive plan.

**Policy F.5:** The city will adopt and enforce ordinances that prohibit development approval, if the development causes the Level of Service on the transportation facility to decline below the standards adopted in this element.

**Policy F.6:** The city will coordinate consistency and compatibility between transportation plans with Quad-Co (Grant, Adams, Lincoln, and Kittitas Regional Transportation Organization).

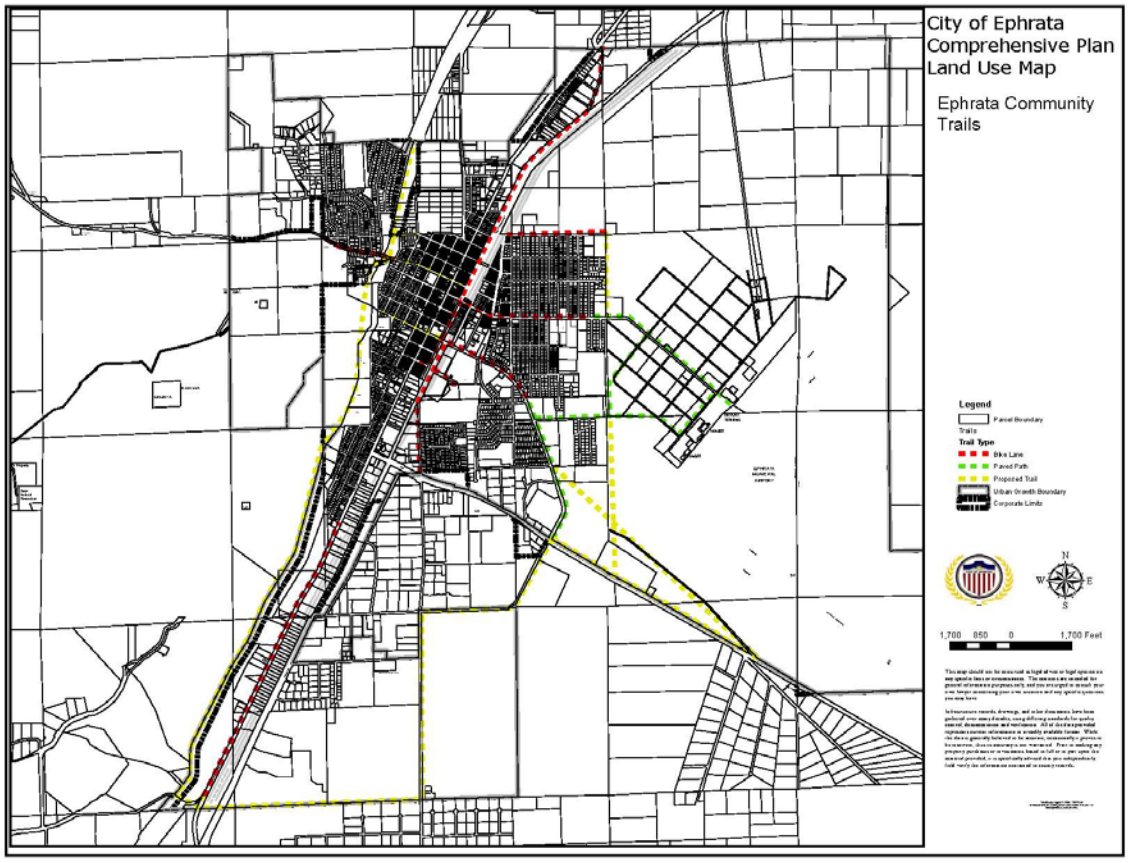
## PUBLIC TRANSPORTATION

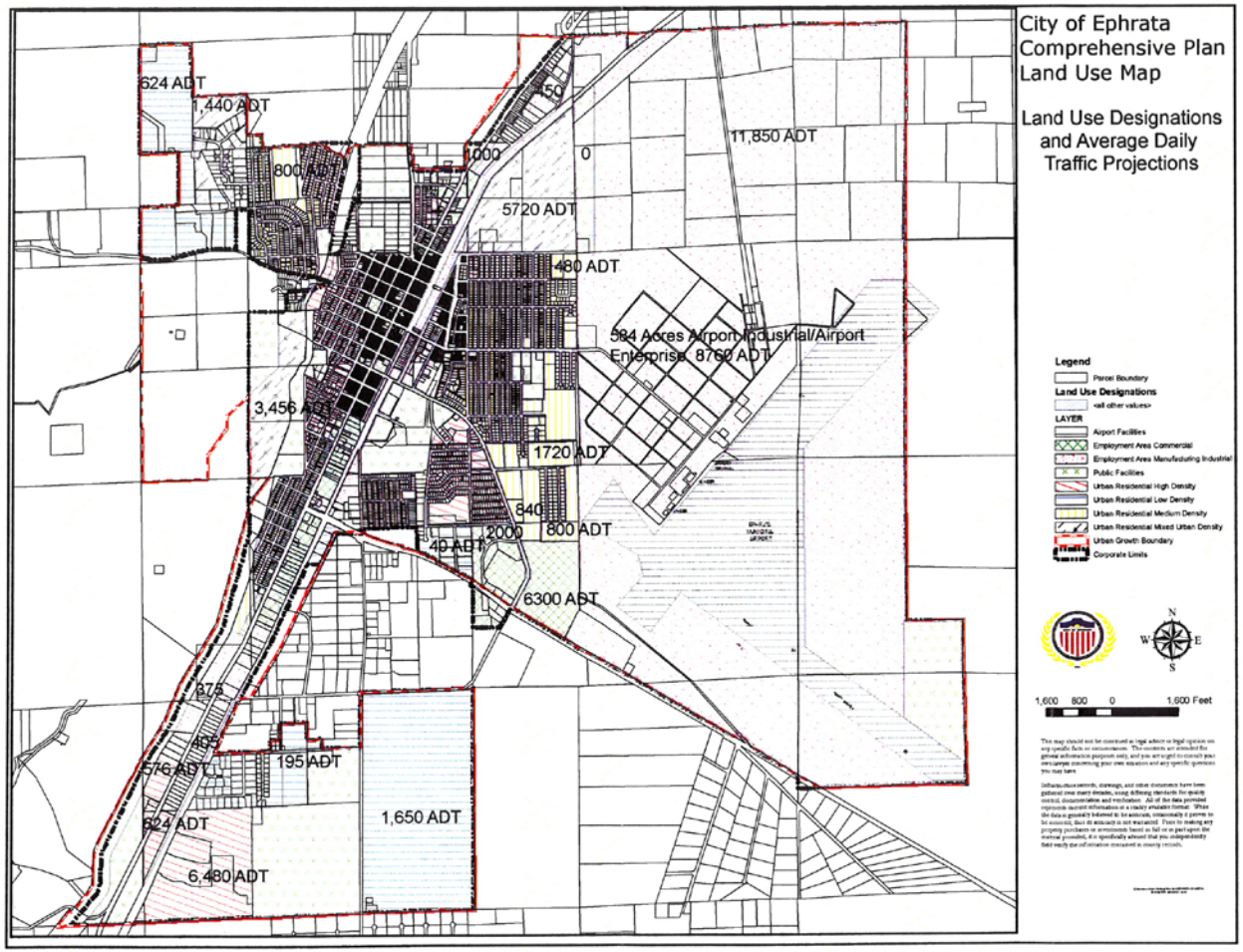
**Railway Service-**The freight and passenger service level is to be maintained for the City of Ephrata and UGA.

**Mass Transit-**The City of Ephrata will continue to participate in the Grant County Transit Authority projects to provide public transportation services for City and UGA residents.

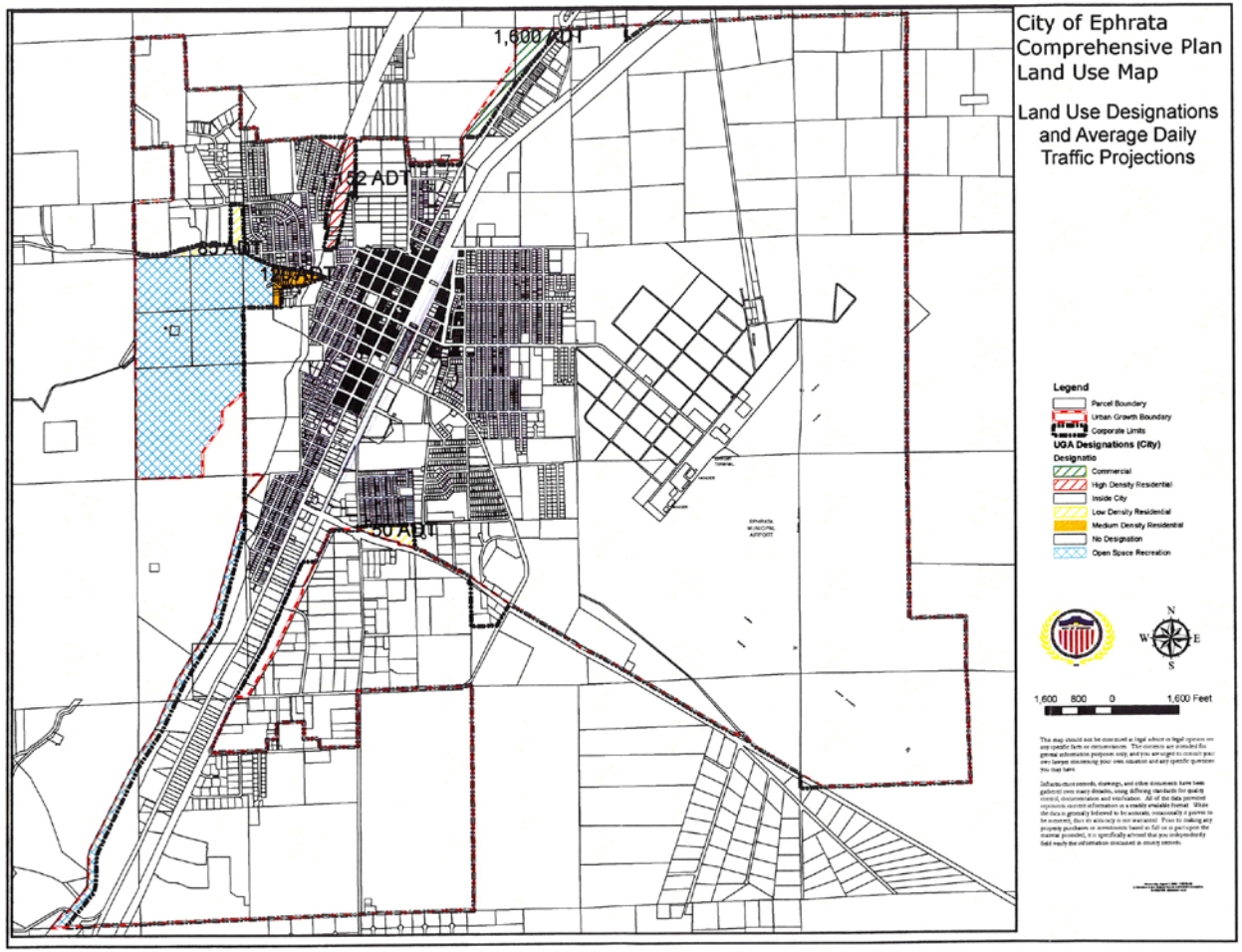
**Pedestrian / Bicycle Trails-**The Open Space and Recreation Element of the Comprehensive Plan proposes a pedestrian/bicycle transportation system that will loop the City and provide links between activity centers. The City is making progress in designating parts of this system. A downtown park has been completed with a pedestrian link between the inter-modal transportation hub and the downtown business core area of Ephrata.

Trail
Map




City of Ephrata
Comprehensive Plan
Land Use Map
Land Use Designations
and Average Daily
Traffic Projections
624 ADT
1,440 ADT
800 ADT
1000
50
0
11,850 ADT
5720 ADT
480 ADT
584 Acres Airport Industrial/Airport
Enterprise 8760 ADT
3,456 ADT
1720 ADT
840
2000
800 ADT
40 ADT
6300 ADT
875
405
576 ADT
195 ADT
624 ADT
1,650 ADT
6,480 ADT
Legend
Parcel Boundary
Land Use Designations
<all other values>
LAYER
Airport Facilities
Employment Area Commercial
Employment Area Manufacturing Industrial
Public Facilities
Urban Residential High Density
Urban Residential Low Density
Urban Residential Medium Density
Urban Residential Mixed Urban Density
Urban Growth Boundary
Corporate Limits
N
W
E
S
1,600 800 0 1,600 Feet

TR-27


1,600 ADT
22 ADT
50 ADT
City of Ephrata
Comprehensive Plan
Land Use Map
Land Use Designations
and Average Daily
Traffic Projections
Legend
Parcel Boundary
Urban Growth Boundary
Corporate Limits
UGA Designations (City)
Designatio
Commercial
High Density Residential
Inside City
Low Density Residential
Medium Density Residential
No Designation
Open Space Recreation
N
W
E
S
1,600 800 0 1,600 Feet

TR-28

## STREETS, ROADS & HIGHWAYS

The **Land Use Plan and Traffic Projections** for Ephrata and the UGA, shown on the preceding map, is the basis for developing alternatives for the area's future transportation system. Future traffic volumes in Average Daily Trips (ADT) are projected for each residential area proposed for development according to the land use plan densities for housing units. The traffic generated for each major development planned for the City and UGA is illustrated on the preceding map. Traffic volumes (ADT) for the proposed development of commercial and industrial areas of the City and UGA are calculated on an acreage basis and also shown on the preceding **Land Use Plan and Traffic Projections** map.

Traffic from outside the UGA has been increasing. The impact of this traffic on the area's street network is taken into account to provide consistency with the QUADCO Regional Transportation Plan. This additional "outside" traffic has a significant impact on the need for expanding the street, road and highway system of the City of Ephrata and UGA.

The following table, **FUTURE TRAFFIC-Residential Development within Ephrata** shows the residentially generated traffic increase for the City. The second table, **FUTURE TRAFFIC-UGA Residential Development outside Ephrata** shows the additional residential traffic projected for the Urban Growth Area outside of the City of Ephrata which will result from development as shown on the Land Use Plan element in this Comprehensive Plan. The future traffic volumes were projected on a gross acreage basis for each category of the Land Use Plan. Low Density Residential area traffic volumes were calculated by using an average of 5 trips (ADT) per acre of proposed development. Medium Density Residential area traffic volumes were projected by using an average of 40 trips (ADT) per acre. High Density Residential area traffic was determined by using an average of 48 trips (ADT) per acre. Mixed Residential area traffic volumes were calculated using a split of 60 trips (ADT) and 20 (ADT) per acre.

**FUTURE TRAFFIC**
**Residential Development within Ephrata**

| | | |
|---|---|---|
| Low Density | (486 acres X 5) | 2,430 ADT |
| Medium Density | (155 acres X 40) | 6,200 ADT |
| High Density | (160 acres X 48) | 7,680 ADT |
| Mixed Density | (173 acres X 60) | 10,380 ADT |
| **Total Traffic (ADT)** | | **26,690 ADT** |

**FUTURE TRAFFIC**
**UGA Residential Development outside Ephrata**

| | | |
|---|---|---|
| Low Density | (27 acres X 5) | 135 ADT |
| Medium Density | (3 ac X 40) | 120 ADT |
| High Density | (24 ac X 48) | 1152 ADT |
| Mixed Density | (0 ac X 20) | 0 ADT |
| **Total Traffic (ADT)** | | **1,407 ADT** |

The following table, **FUTURE TRAFFIC-Commercial Development & Industrial Development**, illustrates the projected traffic volume increases for Ephrata and the UGA which will result from development of commercial and industrial areas shown on the Land Use Plan element of this Comprehensive Plan. The future traffic volume increases were projected on a gross acreage basis. The traffic volumes for Commercial areas within the City were figured on the basis of 100 trips (ADT) per acre. The traffic volumes for UGA Commercial areas outside of the City were computed using 50 trips (ADT) per acre. Industrial areas anticipated to be developed by the Land Use Plan are expected to generate traffic at the rate of 15 trips (ADT) per acre.

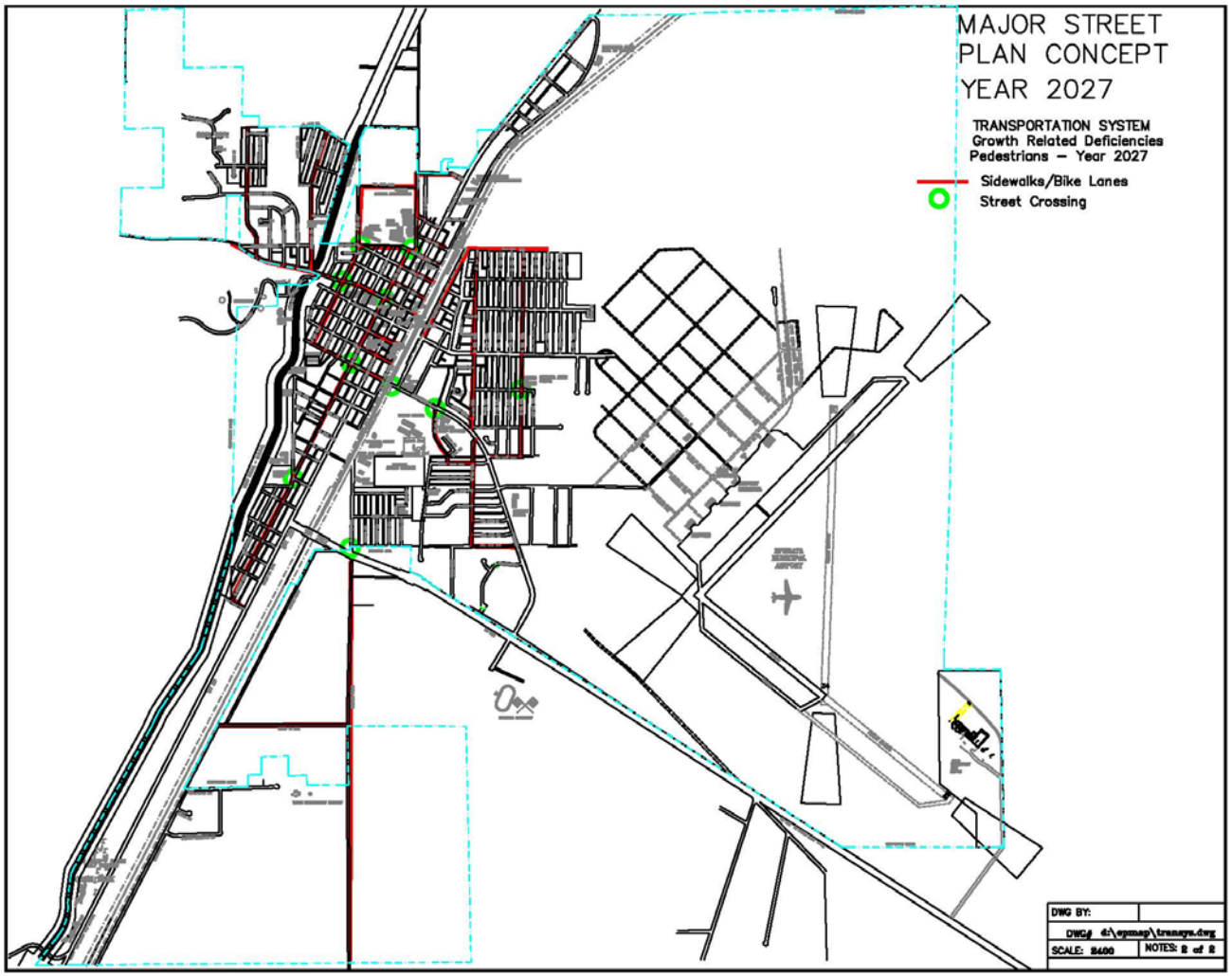
**FUTURE TRAFFIC**

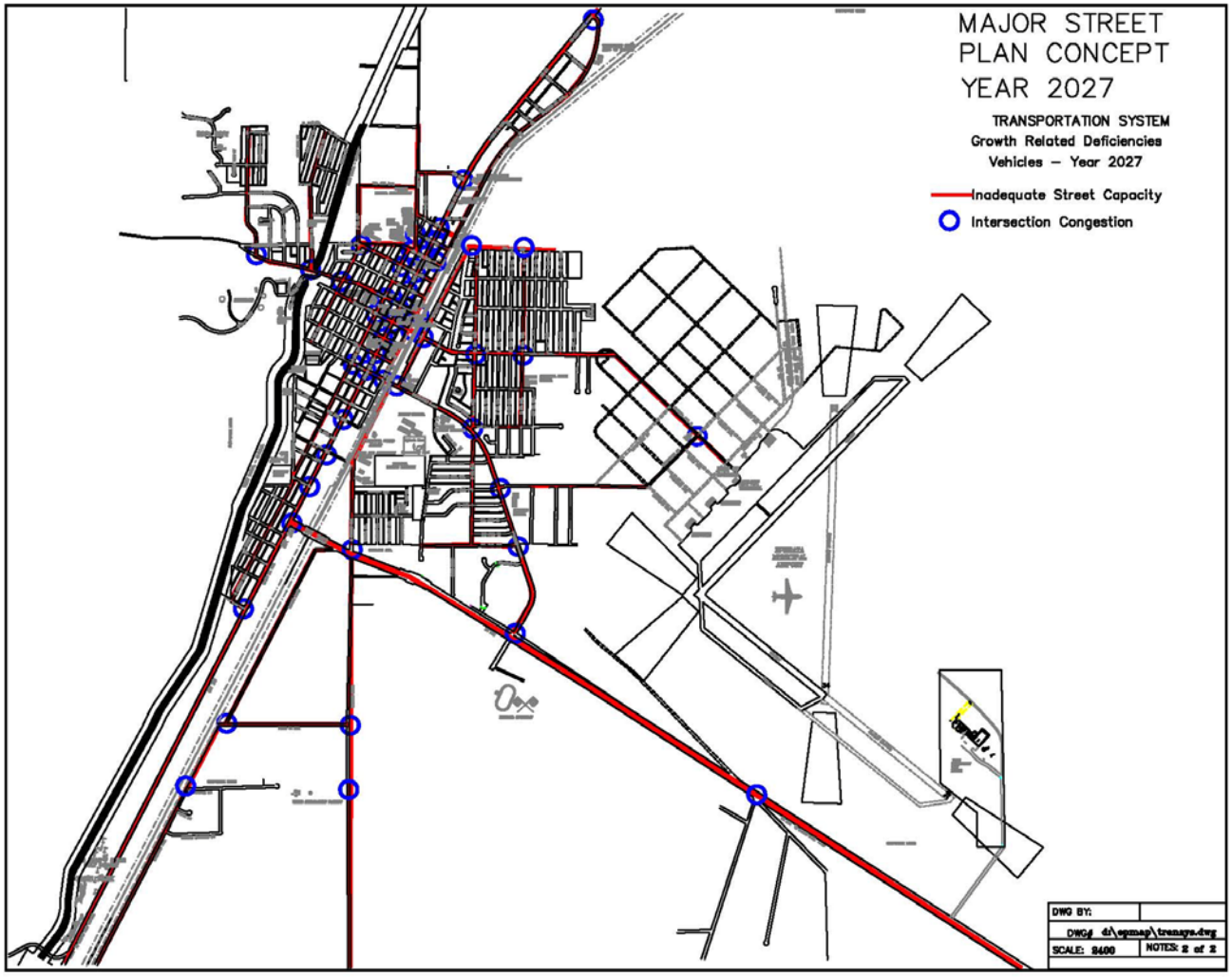
| | **Commercial Development** | **Development** | **Industrial** | |
|---|---|---|---|---|
| City | (109 ac X 100) | 10,900 | (0 ac X 15) | 0 ADT |
| UGA | (32 ac X 50) | 1,600 | (0 ac X 15) | 0 ADT |
| **Total** | | **12,500 ADT** | | **0 ADT** |

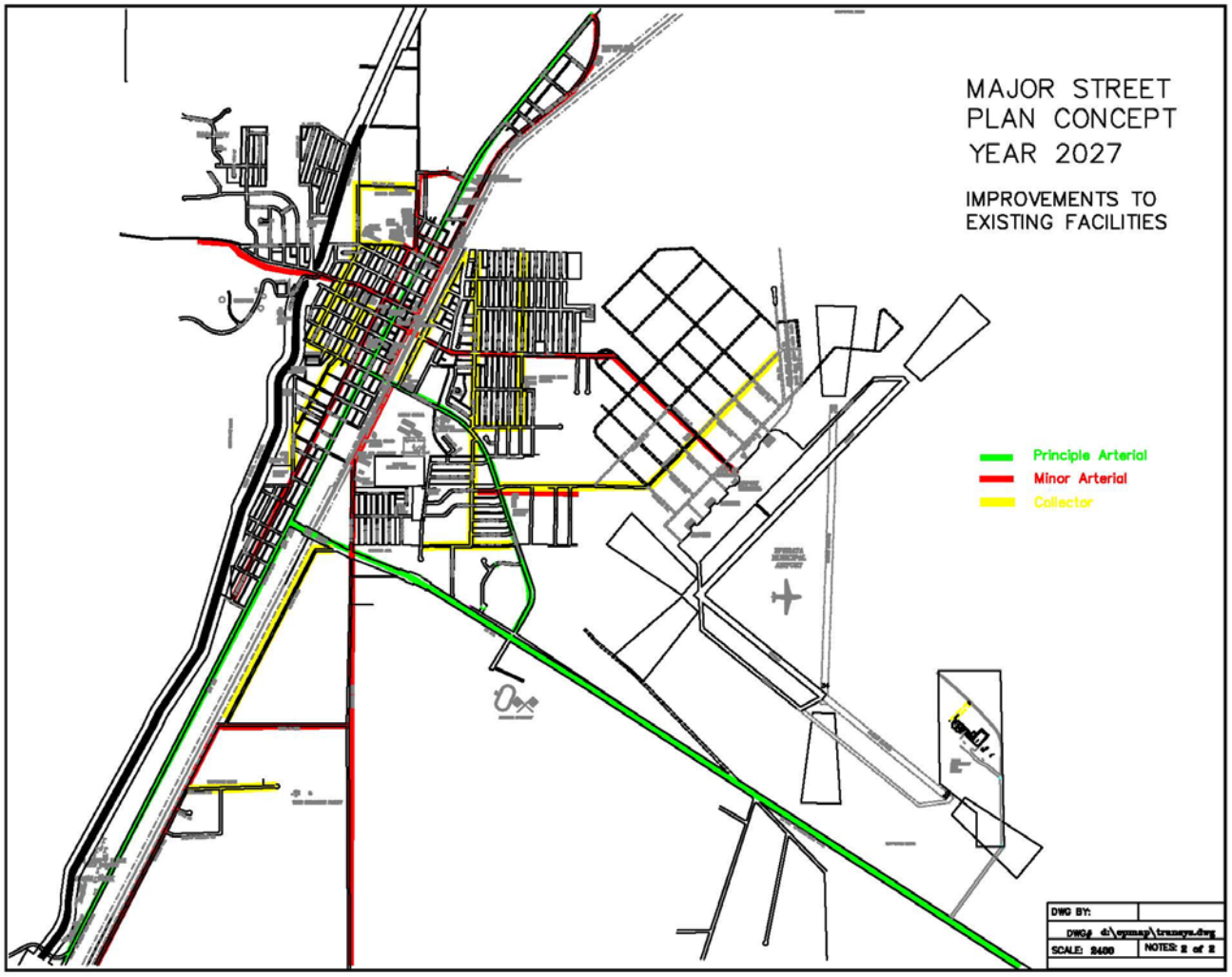
The Future Traffic tables illustrate the increase in traffic volumes as development occurs in the City of Ephrata and UGA. The increasing traffic volumes will create deficiencies in the existing transportation system. Locations of anticipated deficiencies are illustrated on the following map, **SYSTEM DEFICIENCIES-PEDESTRIANS**, for pedestrian and bicycle traffic problems. An additional map follows, **SYSTEM DEFICIENCIES-VEHICLES**, showing the areas that will become deficient for operating vehicles because of congestion resulting from large increases in traffic volumes that can be expected during the next 20 years. These maps illustrate that the existing transportation system in the City and UGA will not adequately carry the high volumes of anticipated future traffic.

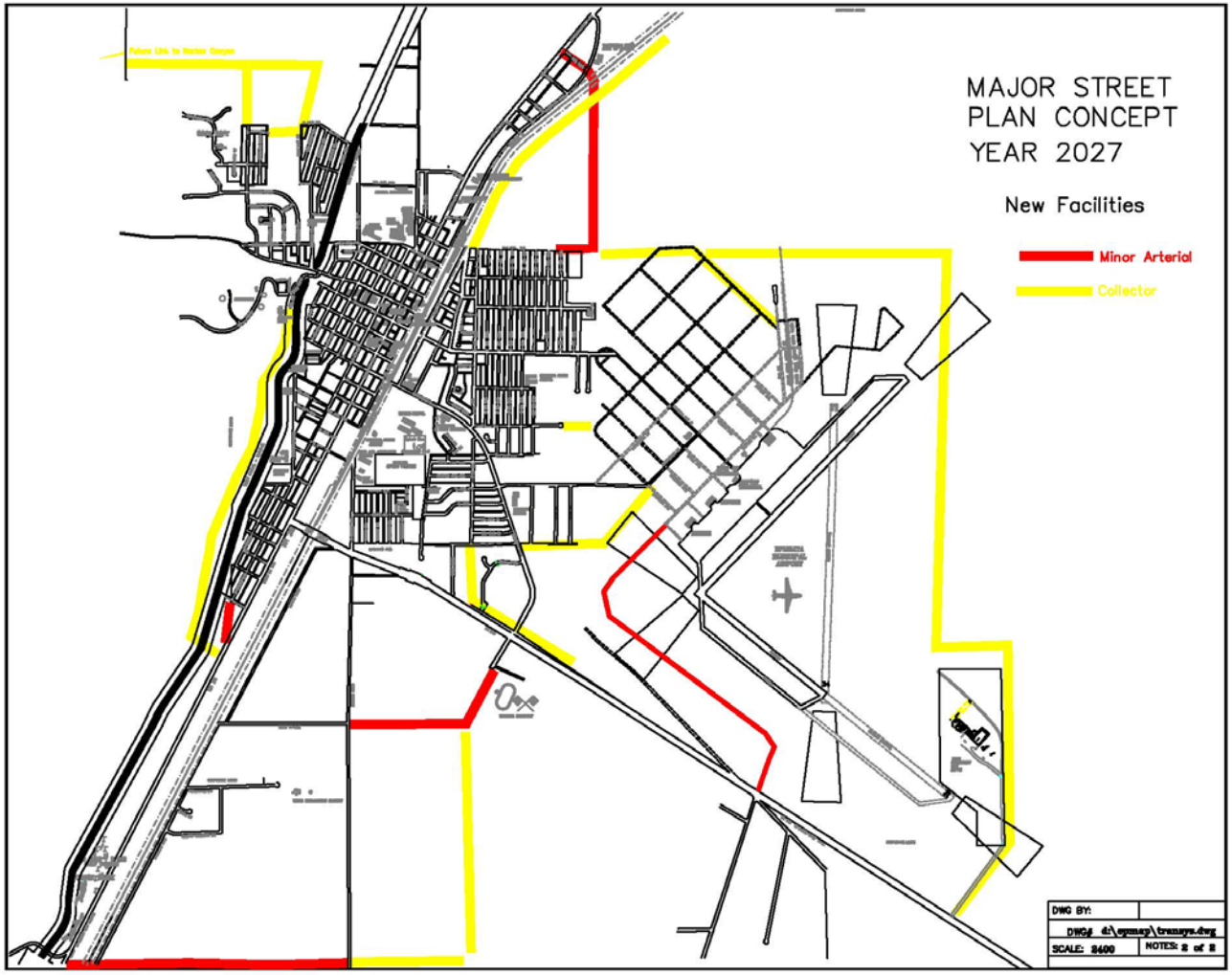
The intersections and street segments identified as deficient are obvious problem areas that will need to be evaluated periodically as development takes place. It will be important to anticipate the severity of traffic and pedestrian conflicts in these areas so that the most appropriate projects to improve safety or reduce congestion can be undertaken in a timely manner. It will be important to undertake a process that can be used to determine appropriate mediation requirements for future site development requests. Determining the traffic volumes likely to be generated by each site development proposal is the key to determining potential impact upon the existing street system to obtain developer participation in needed street improvements. The need for implementing a plan for development of the area's future street system is urgent.

It is the intent of the City to provide arterial streets (Primary Streets and Secondary Street as defined in the Street and Utility Standards for the City of Ephrata) where necessary to facilitate traffic flow (average daily counts) which are greater than 1,000 vehicle trips per day. Tertiary collector design standards shall be used (Tertiary Collector as defined in the Street and Utility Standards for the City of Ephrata) for streets accessing high density residential and multi-family residential areas, accessing at least 30 dwelling units or building lots, or commercial and industrial areas where traffic is less than 1,000 vehicles per day (average daily traffic count) will be required. All other low intensity roads shall maintain the residential street standard as defined in the Street and Utility Standards for the City of Ephrata for residential streets.


MAJOR STREET
PLAN CONCEPT
YEAR 2027
TRANSPORTATION SYSTEM
Growth Related Deficiencies
Pedestrians – Year 2027
Sidewalks/Bike Lanes
Street Crossing
DWG BY:
DWG# d:\cpmap\transpx.dwg
SCALE: 8400
NOTES: 2 of 2


MAJOR STREET
PLAN CONCEPT
YEAR 2027
TRANSPORTATION SYSTEM
Growth Related Deficiencies
Vehicles – Year 2027
Inadequate Street Capacity
Intersection Congestion
DWG BY:
DWG# d:\epmap\transyr.dwg
SCALE: 8400
NOTES: 2 of 2


MAJOR STREET
PLAN CONCEPT
YEAR 2027
IMPROVEMENTS TO
EXISTING FACILITIES
Principle Arterial
Minor Arterial
Collector
DWG BY:
SCALE: 2400
NOTES: 2 of 2


MAJOR STREET
PLAN CONCEPT
YEAR 2027
New Facilities
Minor Arterial
Collector
DWG BY:
SCALE: 2400

The preceding map shows the **Year 2027 Major Street Plan Concept** that has been prepared to provide facilities that will be adequate to accommodate anticipated traffic volumes in the City and UGA. As can be seen, from a review of the preceding **FUTURE TRAFFIC** tables, there could be over 40,600 new vehicle trips generated by development in the City of Ephrata and UGA during the next 20 years. As this development occurs the existing transportation system capacity to handle additional traffic, at the current level of service, will be reached soon and require major improvements to maintain the community's desired standards. This **Major Street Plan Concept** provides the arterial and collector facilities needed to adequately accommodate the Year 2027 traffic volumes anticipated for the City of Ephrata and UGA.

The existing street system will not handle increased volumes of traffic without major renovation projects and the extension of a number of streets to serve as arterial and collector routes to provide for more efficient traffic circulation within the City of Ephrata and UGA during the next 20 years. Several new facilities will be needed to accommodate anticipated traffic volume increases and provide for efficient traffic circulation on the street system. Extension of existing streets as well as new facilities are needed to provide for routing the increasing traffic volumes through the eastern side of the City and UGA, rather than continue to direct all traffic through the middle of Ephrata.

The street plan, shown on the preceding map, contains a system of Major Arterial, Minor Arterial and Collector Streets needed to serve the existing and future land use development anticipated during the next 20 years in the City of Ephrata and UGA. This **Year 2027 Major Street Plan Concept** illustrates the proposed extension of existing streets and construction of new streets that will be needed as a result of the traffic generated from development of various land uses proposed for the area. The new construction projects are identified in areas where streets will need to be extended into or through large sites that are currently undeveloped, but, are identified for future development in the Land Use Element of this Comprehensive Plan. Also, it will be necessary to extend minor arterial and collector streets to provide for continuous routes for traffic circulation within the UGA.

It is anticipated that this plan will guide the subdivision proposals from property owners and developers. The provision of right-of-ways for the planned facilities within future site development or subdivision proposals will be critical in order to insure the possibility of developing

adequate arterial and collector street systems to handle future traffic within the UGA. The City and County will need to work closely with developers and be prepared to participate in some of their projects that provide facilities to serve adjacent development generated traffic. In addition, the City and County may need to assist with projects which provide for circulation of traffic through development sites from other areas of the UGA.

This initial transportation planning effort is very general and will need to be followed by an extensive transportation study for the City of Ephrata and UGA. Each segment of the proposed system of streets anticipated to be needed to serve the traffic resulting from future land use development in the Ephrata area needs an in-depth evaluation.

## Transportation Demand Management (TDM)

Transportation Demand Management (TDM) techniques play an important part in Ephrata's inventory of transportation solutions. TDM is a term applied to a broad range of strategies that are primarily intended to reduce and reshape demand (use) of the transportation system. TDM demand-side strategies (as opposed to supply side strategies such, as new lane construction) are intended to affect how, if, and when the transportation system is used. TDM strategies influence travel behavior by influencing the commuter's choice of mode, time, or route, in order to reduce the number of vehicles on the roads at congested times and to provide mobility options. Techniques which have an effect on the cost of the trip, also work well to influence the mode choice.

TDM strategies employed within the City of Ephrata include Senior Center Shuttle, and hospital shuttle; promoting public transit; adding bike and pedestrian trails/paths on newly constructed arterials and placement of bike and pedestrian trails on rebuilt arterials; connecting bike trails to county trail systems when available; connecting bicycle and pedestrian access between businesses and residential areas to facilitate non-motorized mobility for residents; and encouraging pedestrian friendly design concepts in new construction through the City's residential design standards. TDM plays an important role in future land use development and ensuring our community continues to be a healthy environment for both families and commerce.

## Funding Shortfall Provisions

If the City is faced with transportation funding shortfalls, any combination of the following strategies should be used to balance revenues and public facility needs:

- Increase revenues through use of bonds, new or increased user fees or rates, new or increased taxes, regional cost sharing, or voluntary developer funds.

- Decrease level of service standards if consistent with Growth Management Act Goals.

- Reprioritize projects to focus on those related to concurrency.

- Decrease the cost of the facility by changing project scope, or finding less expensive alternatives.

- Decrease the demand for the public service. This could involve instituting measures to slow or direct population growth or development, for example, developing only in areas served by facilities with available capacity until funding is available for other areas, or by changing project timing and phasing.

- Revise the comprehensive plan's land use element to change types or intensities of land use as needed to match the amount of transportation facilities that can be provided.

- **TRANSPORTATION GOALS AND POLICIES**

Provision and Coordination

Goal 1: To provide safe, convenient and efficient transportation for all residents and visitors to the city. This includes improvements to existing facilities as well as extensions of transportation to new developments.

Goal 2: To ensure that the transportation system is adequate to serve all existing and future land uses.

Goal 3: To coordinate review of all future proposed roadway corridors with the county with respect to critical areas land to minimize adverse impacts.

Goal 4: To provide a cost affordable Level of Service for the city roadway network.

Multimodal Transit Options

Goal 5: To develop a plan to provide avenues for non-motorized travel.

Safety

Goal 6: To maintain a low accident rate as growth occurs.

Goal 7: To provide "stop and shop" opportunities and slow traffic through the downtown core.

| **Goal** | **Policy** | **Program** |
|---|---|---|
| 1. To provide safe, convenient and efficient transportation for all residents and visitors to the city. This includes improvements to existing facilities as well as extensions of transportation to new developments. | 1.a. Develop and enforce a Truck Route Ordinance where needed and maintain appropriate signage for the truck route to ensure compliance. | 1.a.1. Coordinate with Washington State Department of Transportation (WSDOT) for guidance. |
| | 1.b. Examine opportunities to expand the County's Public Benefit Transportation Area (PBTA) to provide regional transportation through cooperation with regional transit systems. | 1.b.1. Assess rider-ship needs. |
| | 1.c. Amend and adopt design criteria for a Landscape Ordinance and a Signage Ordinance for new roadways. | 1.c.1. Reduce confusion and clutter by combining or eliminating signage where appropriate or allowed under state law. |
| | | 1.c.2. Consider creating more aesthetically pleasing |

| | | |
|---|---|---|
| | | street signs for roadways in new subdivisions. |
| | 1.d. Review designs of parking elements on site plans submitted through the development review and construction processes. | 1.d.1. Create a parking element review process. |
| 2. To ensure that the transportation system is adequate to serve all existing and future land uses. | 2.a. Ensure coordination with the Land Use Element and with the transportation plans of adjacent jurisdictions. | |
| | 2.b. Ensure that a consistent level of service is provided by developing a concurrency management system. | 2.b.1. Explore alternatives for demand management. |
| 3. To coordinate review of all future proposed roadway corridors with the county with respect to critical areas land to minimize adverse impacts. | 3.a. Route new roads to avoid traversing publicly owned natural preserves, parks and recreation areas, significant cultural resources, and areas identified as critical wildlife habitat, except in cases of overriding public interest. | |
| | 3.b. Ensure all road construction projects meet or exceed the minimum requirements for storm water runoff. | 3.b.1. Verify minimum storm water requirements in City's Zoning and Subdivision Ordinance. |
| | 3.c. Adopt an official right-of-way map identifying future right-of-way needs based on the Transportation Element. | 3.c.1. Coordinate the selection of the criteria used to establish future right-of-way across sections of the state highway system with the Washington State Department of Transportation (WSDOT). |
| 4. To provide a cost affordable Level of Service for the city roadway network. | 4.a. Use the Link (A-F) LOS standards as minimum criteria for the quality of service provided at peak hours for roadway segments on all four arterial that handle significant levels of local traffic. | 4.a.1. Maintain an annually updated listing of analyzed and prioritized road improvement needs based on the Transportation Element. |
| | | 4.a.2. Upon the annual date of adoption, the city's concurrency management system will be revised as part of the annual review and amendment of the comprehensive plan. |
| | 4.b. Utilize development phasing in the Urban Growth Area to assure | 4.b.1. Adopt and enforce ordinances that prohibit development approval, if |

| | | |
|---|---|---|
| | consistency with the associated LOS standard by year or with the capacity of the existing and programmed roadway network as adopted by the city. | the development causes the LOS on the transportation facility to decline below the standards adopted in this element. |
| | 4.c. The city will coordinate consistency and compatibility between transportation plans with Quad-Co. (Grant, Adams, Lincoln and Kittitas Regional Transportation Organization). | 4.c.1. Maintain currency with Quad-Co. transportation plans. |
| 5. To develop a plan to provide avenues for non-motorized travel. | 5.a. Formulate and adopt development regulation requiring and/or enabling developers to provide pedestrian trails or sidewalks in conjunction with new construction projects. | 5.a.1. Require sidewalks or separated pedestrian pathways in all new residential developments. |
| | | 5.a.2. Install new sidewalks, where appropriate, in pedestrian corridors considered by the city to be high priority (i.e., parks and areas used by elderly or disabled persons) within two years of identification. |
| | | 5.a.3. Revise roadway standards to allow for narrower road widths compensating for sidewalk or trail requirements. |
| | 5.b. Coordinate and install sidewalks at locations requested by the school district within two years of identification. | 5.b.1. Look for linkage opportunities as new pedestrian trails are developed. |
| | 5.c. Incorporate regular and routine consideration of bicycles in accordance with the Washington State Department of Transportation (WSDOT) and the American Association of State Highway and Transportation Officials (ASSHTO) standards in all transportation improvements. | |

| | | |
|---|---|---|
| 6. To maintain a low accident rate as growth occurs. | 6.a. Maintain needed traffic data such as traffic counts and accident data to support studies and planning and operational activities for the Department of Public Works. | 6.a.1. Identify specific high accident intersections on both the collector and arterial system within two years of plan adoption. |
| | | 6.a.2. Continue to provide maintenance activities related to traffic control devices and roadway material within guidelines established by the Department of Public Works. |
| | | 6.a.3. Conduct a study to identify standards that enhance the safety of pedestrians and motorists in regard to sidewalk design and maintenance, lighting requirements, signs and access to properties. |
| 7. To provide “stop and shop” opportunities and slowing traffic through the downtown core. | 7.a. Coordinate with WSDOT to adequately sign state highways where appropriate. | |
| 8. Implement the city’s transportation plan, | 8.a Maintain existing roads to provide safe travel for all modes of transportation. On a priority basis improve existing roads to meet applicable standards specified in the city's transportation plan. | |
| | 8.b. Require new roads in developments to meet the applicable road standards contained in the city's transportation plan. | |
| | 8.c. Require existing private roads to be improved to city standards before they will be accepted as city roads. | |
| | 8.d. In the event that funding to complete identified transportation improvements is not adequate to address those needs, a discussion of how additional funding will be raised or how land use assumptions will be reassessed to ensure that | |

| | | |
|---|---|---|
| | level of service standards are met. | |
| 9. Ensure Transportation improvements are in place or financial commitment exists to complete those improvements that are needed for new and redeveloped projects. | 9.a. As part of development proposals, require applicant to complete a traffic impact analysis to identity the impacts on the transportation system | 9.a.1. Require the applicant to be mitigated either wholly by the applicant or jointly between the applicant and the affected transportation jurisdictions. |
| 10. Consider requiring traffic impact fees when traffic analysis indicates a drop in level of service. | 10.a. Implement program that defines when to require traffic analysis of a project depending on size of development. | |
| | 10.b. Ensure consistency between land use and transportation plans so that land use and adjacent transportation facilities are compatible. | |
| 11. Coordinate land use and transportation planning to meet the needs of the City consistent with the Growth Management Act. | 11.a. Locate commercial, industrial, multifamily, and other uses that generate high levels of traffic in designated activity centers around intersections of principal or minor arterials or around freeway interchanges. | |
| | 11.b. Insure the transportation system is developed consistent with the anticipated development of the land uses, and acknowledge the influence of providing transportation facilities to accelerate or delay the development of land uses, either by type or area. | |
| | 11.c. Promote land use patterns which support public transportation and insure the development includes transit-friendly features. | |
| 12. Reduce disruptions which degrade the safety and reasonable functioning of the local transportation system. | 12.a. Establish a commercial freight route to insure the mobility of goods and services, as well as of people, and to improve the reliability of freight mobility. | |
| 13. Balance the dual goals of providing accessibility within the local street system and neighborhood safety. | 13.a Insure reliable traffic flow and mobility on arterial roads, especially on regional through routes, | |

| | | |
|---|---|---|
| | while protecting local neighborhood roads from increased traffic volumes. | |
| | 13.b. Where overflow traffic from the regional system significantly impacts neighborhoods, protect the residential area. | |
| 14. Design transportation facilities to preserve and to be consistent with the natural and built environments. | 14.a. Encourage pedestrian and bicycle connections between residential developments, neighborhood commercial centers, recreation areas, and to serve as an alternative to automobile use. | |
| | 14.b. Arrange streets and pedestrian paths in residential neighborhoods to form a grid network, providing multiple choices as to path and mode. | |
| | 14.c. When designing signalized intersections, consider acquiring the right of way for potential right turn lanes to meet the future demand. | |
| 15. Pursue funding for transportation improvements from all potential sources in an efficient and equitable manner. | 15.a. Allow for funding of growth-related traffic improvements proportionately by impact fees or other mechanisms that apportion costs in relation to impact charged to new development. | |
| | 15.b. Pursue federal, state and local sources of funding (e.g., loans, matching funds) for transportation improvements. | |
| | 15.c. Establish a mechanism to provide multi-jurisdictional cooperation to fund transportation improvements, participate in joint ventures and promote them to improve inter-jurisdictional transportation systems. | |
| 16. Coordinate transportation operations, planning, and improvements with the State, the County, neighboring jurisdictions, and all | 16.a. Look for opportunities to partner with regional transit agencies and neighboring jurisdictions in order to improve funding | |

| | | |
|---|---|---|
| transportation planning agencies to ensure the City's interests are well represented in regional planning strategies, policies and projects. | opportunities from state, federal or other grant providers. | |
| | 16.b. Work with neighboring jurisdictions to coordinate planning for development which impacts transportation level-of-service across jurisdictional boundaries. | |
| | 16.c. Promote joint funding of projects with the State, the County, and neighboring jurisdictions for projects serving multiple interests and supporting regional growth plans. | |
| | 16.d. Coordinate with the County and neighboring jurisdictions to implement concurrency strategies and provide for mitigation of shared traffic impacts through street improvements, signal improvements, intelligent transportation systems improvements, transit system improvements, and/or transportation demand management strategies. | |
| 17. The transportation system should be coordinated with neighboring cities and other transportation providers. | 17.a. The City should work with other jurisdictions to plan multi-jurisdictional projects necessary to meet share transportation needs. | |
| | 17.b. The City Public Works Director shall work with the Washington State Department of Transportation, the Quad County Regional Transportation Planning Organization, an through other appropriate avenues to ensure that appropriate investments are made in the State transportation system to ensure the adequacy of the overall transportation system. | |

**Policy F.2:** The city will use the Link (A-F) Level of Service standards as minimum criteria for the quality of service provided at peak hours for roadway segments on all four arterials that handle significant levels of local traffic. The evaluation of Level of Service will be conducted using the ratio of "peak hourly demand volume" to "peak hourly capacity."

LOS A: Primarily free-flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions. **Volume/Capacity Ratio less than or equal to 0.60.**

LOS B.: Reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tensions. **Volume/Capacity Ratio greater than or equal to 0.60 and less than or equal to 0.70.**

LOS C: Stable traffic flow operations. However, ability to maneuver and change lanes may be more restricted than in LOS B, and longer queues an/or adverse signal coordination may contribute to lower average travel speeds. Motorists will experience appreciable tension while driving. **Volume /Capacity Ratio greater than 0.70 and less than or equal to 0.80.**

LOS D: Small increases in traffic flow may cause substantial increases in approach delays and, hence, decreases in speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combinations of these. **Volume /Capacity Ratio greater than 0.80 and less than or equal to 0.90.**

LOS E: Significant delays in traffic flow operations and lower operating speeds. Conditions are causes by some combination or adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing. **Volume /Capacity Ratio greater than 0.90 and less than or equal to1.00.**

LOS F: Traffic flow operations at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse signal progression is frequently a contributor to this condition. **Volume /Capacity Ratio greater than 1.00.**

## STREET PLAN IMPLEMENTATION PROGRAM SUMMARY

Implementation of the **Year 2025 Major Street Plan Concept** begins with the programming of projects to be undertaken for the 6 Year (short-term) and long range (20-yr) capital improvement budgets of the City of Ephrata. The following street improvement program summary has been prepared with specific project costs identified for projects to be undertaken in the next 6 years. Also, included in the summary is an estimate of general project costs for long-term plan implementation beyond the initial short-term (6-yr) street improvement program. These street projects area anticipated to be within the financial capabilities of the City of Ephrata, utilizing a variety of financial resources. The participation of developers, during subdivision and platting or mitigation of other development activities will play an important role in future implementation efforts to accomplish the **Year 2025 Major Street Plan Concept**.

## STREET SYSTEM IMPROVEMENT PROGRAM

| | Project | Year | Source | Cost |
|---|---|---|---|---|
| 1 | A St NE Reconstruction, 3rd Ave. NE to Division Paving | 2007 | City Construction | $ 150,000 |
| 2. | Citywide Water and Roadway Improvements NE Section | 2008 | PWTF and City Funds | $2,500,000 |
| 3. | SR-282 / Nat Washington Way Round-a-bout | 2008 | WSDOT | $1,400,000 |
| 4. | Citywide Water and Roadway Improvements SE Section | 2009 | PWTF and City Funds | $2,250,000 |
| 5. | Nat Washington Way Extension to Dodson Road | 2009 | TIB, City and Developer Financed | $1,000,000 |

| | | | | |
|---|---|---|---|---|
| 6. | Dodson Road Overlay | 2009 | City Construction | $100,000 |
| 7. | Citywide Water and Roadway Improvements NW Section | 2010 | PWTF and City Funds | $2,250,000 |
| 8. | Citywide Water and Roadway Improvements SW Section | 2011 | PWTF and City Funds | $2,250,000 |
| 9. | Alder St. Signalization | 2011 | TIB | $950,000 |
| 10. | Add manholes to Sewer System | 2013 | City Construction | $50,000 |
| 11. | 5th Avenue – Widening, Sidewalk, Nat Washington Way to Corporate Street | 2014 | TIB | $400,000 |
| 12. | Replace Bridge to Well #4 – Widen, Water and Sewer Extension | 2015 | PWTF, TIB | $1,000,000 |
| 13. | Dodson Road Widening – SR 282 to City Limits | 2015 | TIB, County Funding | $1,000,000 |
| 14. | Corporate Street to Division Improvements | 2016 | EDA, SIP | $250,000 |
| 15. | Alder St. Sewer – Sewer from 14th NW to lift station | 2016 | TIB, PWTF | $600,000 |
| 16. | Railroad Avenue Reconstruction | 2017 | TIB, County Funding | $750,000 |
| 17. | Division Street Overlay | 2018 | TIB | $1,000,000 |
| 18. | Nat Washington Way Overlay | 2019 | City Construction | $600,000 |
| 20. | Railroad Crossing at 14th Avenue NW | 2022 | City Construction | $250,000 |
| 21. | | | | |

## BRIDGE SYSTEM IMPROVEMENTS

| | | | | |
|---|---|---|---|---|
| 1. | Canal Crossing to Grandview Hts area | 2020 | LID | 1,000,000 |
| 2. | | | | |
| 3. | | | | |