CHAPTER 7: TRANSPORTATION SYSTEM PLAN

The purpose of this chapter is to provide operational plans for each of the transportation systems within the City of Philomath community. The Philomath Transportation System Plan covers all the transportation modes that exist and are interconnected throughout the urban area. Components of the street system plan include street classification standards, access management recommendations, transportation demand management measures, modal plans, and a system plan implementation program.

STREET FUNCTION CLASSIFICATION AND DESIGN STANDARDS

Street standards relate the design of a roadway to its function. The function is determined by operational characteristics such as traffic volume, operating speed, safety, and capacity. Streets are the city's largest and most used public space. Street standards are necessary to provide the city with roadways that are designed to be attractive places for residents, pedestrians, bicyclists and drivers. Street standards must also create streets that are cost effective to build and maintain while at the same time allow for safe and efficient movement of traffic. Street standards are based on engineering and urban design standards, and state and local policies.

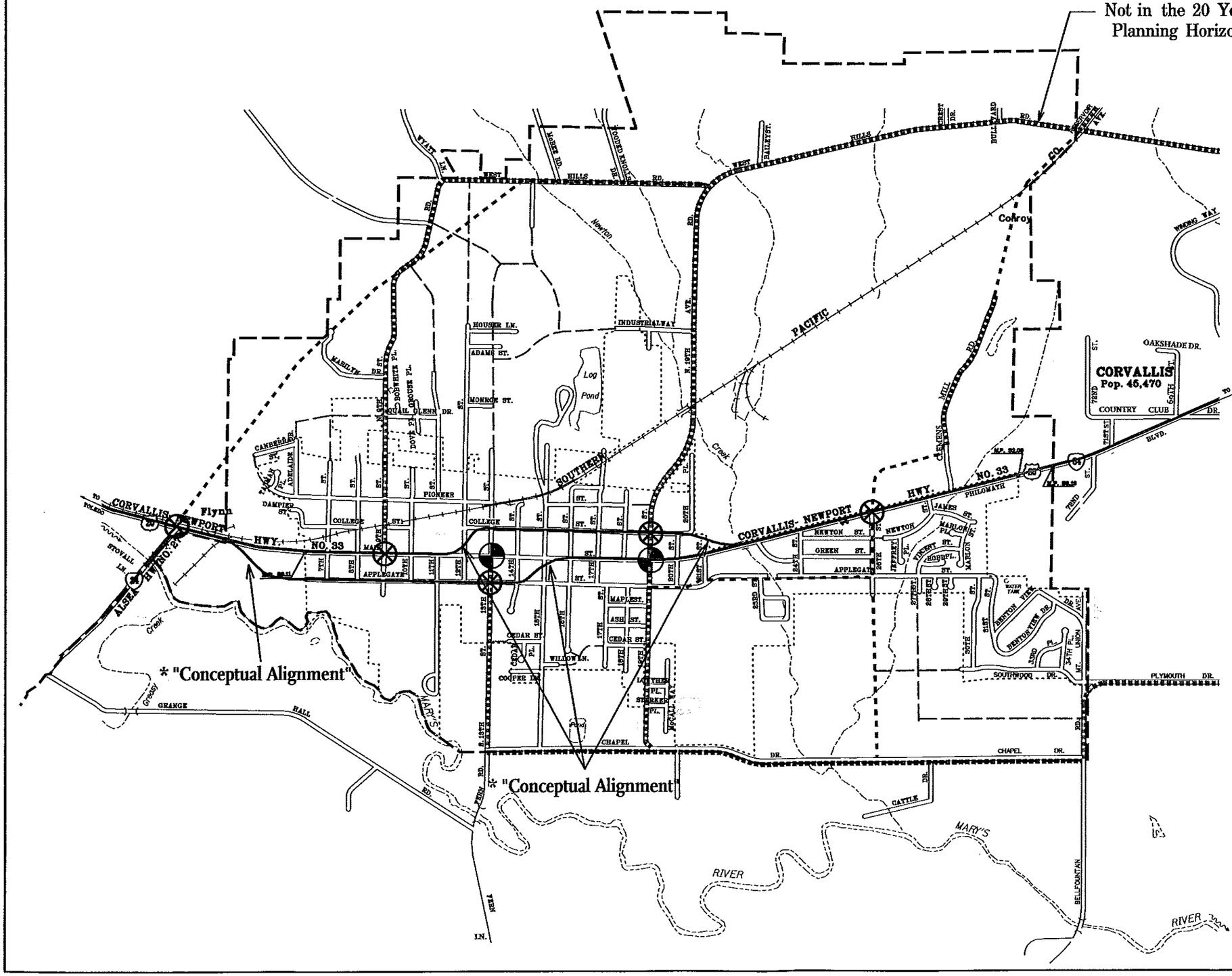
Street System Functional Classification

Street system functional classifications relate the design of a roadway to its function. Street function ranges from freeway (primarily through traffic, high speed, and complete access control) to local (local traffic, low speed and primarily local access with no access control). Operational characteristics such as traffic volume, operation speed, safety and capacity are characteristics that help determine the appropriate functional classification.

The City of Philomath currently classifies all streets within the corporate boundary as either major arterials, minor arterials, collectors, or local streets. Except for North 19th Street, most of the collector streets do not meet the design standards of collectors, which may include multiple travel lanes, on-street parking, curbs and sidewalks and access limitations. In addition, the TPR requires that streets classified as major collectors or higher (including major and minor arterials) must include bike lanes. Currently, none of the major or minor arterials in Philomath include bike lanes.

This plan recommends that the existing street classifications be retained in Philomath with several additions to provide for a more complete street network and to meet the expected future demands. Figure 7-1 shows the recommended future street classification plan for the City of Philomath. General descriptions for the four street classifications in this plan for the City of Philomath are as follows:

- Major Arterial (Main Street, Highway 20/34): These types of highways (streets) carry high volumes of traffic and are usually multi-lane(more than two lanes) in urban areas. The primary function of these streets is mobility and to provide for intercity traffic with the access function being minor.
- Minor Arterial (Alsea Highway/State Highway 34): As compared to a major arterial, this type of highway usually carries less traffic (moderate volumes), has trips of shorter length (moderate length), and serves in a smaller area to interconnect residential, industrial, commercial, and recreational. The access function for these types of highways is of substantial importance.
- Collector Streets: The function of collector streets is to connect local streets, neighborhoods, and commercial and industrial areas with the arterial roadway system.



(NOT TO SCALE)

LEGEND:

- URBAN GROWTH BOUNDARY
- CITY LIMITS
- MAJOR ARTERIAL
- MINOR ARTERIAL
- COLLECTOR STREET
- LOCAL STREET
- NEW LOCAL STREET
- FUTURE COLLECTOR STREET
- EXISTING TRAFFIC SIGNAL
- FUTURE TRAFFIC SIGNAL

* CROSSOVER ALIGMENT NEEDS TO BE REFINED.

FIGURE 7-1

Future Street Classifications and Traffic Signals

ODOT0254/FIG7-1.DGN/JXD/11-19-98

Existing Street Standards

There are no existing street standards outlined under the Philomath Comprehensive Plan. However, the city is in the process of designing street standards and has completed draft standards for review. Additionally, the city adopted in June 1994 and revised in March 1996, the City of Philomath Subdivision Ordinance. The ordinance established specific street design guidelines, including minimum right-of-way and roadway width standards.

Table 7-1 summarizes the existing minimum right-of-way and roadway width standards for city streets in Philomath.

TABLE 7-1
RIGHT-OF-WAY AND ROADWAY WIDTH STANDARDS

Classification	Minimum Right-of-Way Width (ft.)	Minimum Roadway Width (ft.)
Highways - One-way streets	60	44
Highways - Two-way streets	100	84
Arterials - Local	70-80	42
Collector streets	60	36
Minor streets over 1,800 feet in length, or that can be extended to such length	60	36
Minor streets under 1,800 feet in length that cannot be extended to such length	50	36
Cul-de-sac street	50	28
Turnaround radius at end of cul-de-sac	45	37
Alley	20	20

Source: City of Philomath Subdivision Ordinance, adopted June 1994, revised March 1996.

The city's sidewalk ordinance specifies a minimum sidewalk width of 5 feet except in business and commercial zones where 10-foot wide sidewalks are required. The subdivision ordinance requires sidewalks to be built on both sides of a public street.

There are no requirements for integrating bicycle facilities into the existing roadway standards. However, under the subdivision ordinance, the Philomath Planning Commission may require the addition of bicycle facilities where "appropriate to the extension of a system of bicycle routes, existing or planned..."

Recommended Street Standards

Based on the requirements of the Oregon Transportation Planning Rule and the results of the Philomath Community Development Preference Survey, a broader, more detailed range of street types is proposed. These new standards include narrower street widths than are currently allowed. Additionally, the Land Conservation and Development Commission (LCDC) adopted a rule in 1995 requiring local governments to adopt street standards that "minimize pavement width" as part of the adoption of a Transportation System Plan. Narrower streets have several benefits to the community.

- **Narrow streets cost less to build and maintain.** Less road base is needed and less surface area is paved. This results in lower material and labor costs. For example, the city of Eugene staff has estimated that an 8-foot reduction in residential street width results in at least a 10% reduction in paving, sidewalk and finishing costs.

- **Narrow streets reduce the negative impacts of storm water runoff.** Paved streets are impervious surfaces that prevent the filtration of stormwater into the ground. Therefore, streets increase the volume of stormwater runoff, which can cause flooding, erosion, and habitat destruction. Excess paving also reduces the groundwater supply and causes increased pollution of surface waters as a result of contaminants from the road entering the stormwater system.
- **Narrower streets reduce the negative environmental impacts of street construction.** A narrow street cross section will help minimize environmental impacts by requiring less space than a wider street. For improvements on existing unimproved streets, narrower widths will reduce the need to remove existing plants and trees.
- **Narrow streets encourage more efficient land use.** The land saved by using narrow street designs can be used for other purposes including housing, landscaping, and open spaces.
- **Narrow streets are safer streets.** Narrow street designs will discourage the use of local streets by through traffic and help reduce traffic volumes and speeds. According to *Residential Streets*, published in 1990 by the American Society of Civil Engineers, The National Home Builders, and the Urban Land Institute, "excessive widths...encourage greater vehicle speeds." Lower vehicle speeds reduce the occurrence and severity auto accidents, including those between autos and pedestrians and bicyclists. According to the Center for Urban Transportation Research, approximately 55% of accidents are fatal to the pedestrian when vehicle speeds are 30 mph and over, while only 5% are fatal when speeds are 20 mph and under. A 1997 study by Swift and Associates has additionally shown that narrow residential streets pose no greater risk of fire-related injuries, and that, given the large increase in traffic safety posed by narrow streets, if good connectivity of the local street system is encouraged and maintained, there is no apparent fire response benefit of wider streets.
- **Narrow streets improve neighborhood character.** The positive environmental, land use, and traffic safety impacts of narrow streets all work to improve the character and livability of neighborhoods. Narrow streets create an environment of safety and convenience that attracts residents to walk, bicycle, and play in the neighborhood, while maximizing the opportunities for other neighborhood amenities like parks and landscaping through the efficient use of land.

Table 7-2 summarizes the recommended street standards for state highways, county roads and local streets in the Philomath UGB.

TABLE 7-2
RECOMMENDED STREET STANDARDS FOR STATE HIGHWAYS, COUNTY ROADS AND LOCAL STREETS

Type of Street	R.O.W. Width	Paving Width			(a) Sidewalks	(b) Planting Strip	Max. Corner Radius	(c) Bike Lane	Average Daily Traffic (ADT)
		No Parking	Parking One Side	Parking Both Sides					
One-Way Alley (d)	20	12	NA	NA	None	None	10	Shared	NA
Two-Way Alley (d)	20	16			None	None	10	Shared	
Access Lane (e)(f)	42'	NA	21' (7'/14')		1 @ 6'	2 @ 7.5'	10'	Shared	<250
Access Lane (e)(f)	55'			28' (7'/14'/7')	2 @ 6'	2 @ 7. 5'	10'	Shared	ADT
Low-Volume Local (e)	47'	20' (10'/10')			2 @ 6'	2 @ 7.5'	10'	Shared	>250 to 750
Low-Volume Local (e)	48'		21' (7'/14')		2 @ 6'	2 @ 7.5'	10'	Shared	ADT
Low-Volume Local (e)	55'			28' (7'/14'/7')	2 @ 6'	2 @ 7.5'	10'	Shared	
Medium-Volume Local (e)	56'		27' (7'/10'/10')		2 @ 6'	2 @ 9'	10'	Shared	>750
Local/Collector (e)	56'		27' (7'/10'/10')		2 @ 6'	2 @ 8'	10'	Shared	ADT
High-Volume Local/Collector	63'			36' (7'/11'/11'/7')	2 @ 6'	2 @ 7.5'	10'	Shared	
Arterial (non-highway)	60'-80'	34' (6'/11'/11'/6')	41' (6'/11'/11'/7'/6')	48' (7'/6'/11'/11'/6'/7')	2 @ 6	2 @ 7.5'	20'	2@6'	NA
Main Street (non-highway) (h)	60'-80'	NA	NA	36' (7'/11'/11'/7')	2 @ 12'	None	10'	Shared	NA
Highway Couplet (h)(i)(j)	70'-90'	NA	NA	46' (8'/12'/12'/6'/8')	2@ 6-12' (i)	2 @6'-9.5'	25'	1@6'	NA
Two-way Highway (h)(i)(j)	100'	(limited)	NA	88' (8'/6'/12'/12'/12'/12'/12'/6'/8')	2@ 6-12' (i)	2 @6'-9.5'	25'	2@6'	NA

(a) Minimum sidewalk dimension; includes a paved walk and 1' strip behind the walk. For curbside sidewalks, (allowed only on access lanes) the sidewalk dimension includes a 5' paved walk and 6" curb (5'-6" total); the 1' strip behind the walk is added to the planting strip dimension.
(b) Minimum widths. Planting strip dimension includes 6" curb. For curbside sidewalks, an additional 6" would be added to the planting strip dimension.
(c) As indicated, on lower volume streets, bicycles can safely share the roadway with autos.
(d) In addition to the ROW width, alleys require a minimum setback of 2' on each side for a minimum 20' backup distance.
(e) Additional parking to accommodate occasional high parking demand may be provided in congregate parking areas such as parking bays.
(f) Applies to cul-de-sacs and through streets. To maintain street connectivity, cul-de-sacs and other dead end streets are prohibited unless extreme physical or environmental constraints prevent through street connection; they also must include a bike and pedestrian pass-through wherever possible.
(g) Cul-de-sac bulb radius should minimized. T-shaped turn-arounds are encouraged over bulbs on dead ends streets (also see (f)).
(h) Landscaped medians are encouraged for these roadways when possible. ROWs and pavement widths above do not include medians.
(i) Wider sidewalks are encouraged in commercial areas.
(j) Wide sidewalks (12 ft min.) with tree wells and/or planters may be substituted for planter strips in lower speed downtown commercial areas.

Street Sections

Typical cross sections have been developed for several street types within the Philomath UGB. These cross-sections are intended to be used as guidelines in the development of new roadways and the upgrade of existing roadways. Figures 7-2 and 7-3 provide typical roadway cross sections for the various street types identified in the recommended street standards.

Each cross section details lane width, bicycle lanes, parking, sidewalks, landscape (planting strip) areas, and necessary right-of-way. Not all contingencies have been detailed in the cross section because the list would be far too large. To accommodate special circumstances, cross sections can be modified. For example, it may not be desirable to have a sidewalk on the side of a roadway fronting a wetland; the appropriate cross section can be developed by deleting the sidewalk from the cross section designed for the particular type of roadway. Such modifications should be reviewed by all pertinent city departments (planning, fire, police, and public works) and must be approved by the Planning Commission.

Most streets reflect the options available for three levels of on-street parking. For residential streets, whether there is no on-street parking, limited on-street parking or unlimited on-street parking will be determined by presence or absence of garages and the resulting driveway width. For non-commercial streets, the appropriate level of on-street parking will be determined based on the overall existing or planned land use of the area. The specific roadway cross section should be determined at the time of site plan review based on the land use fronting the roadway. Bicycle lanes should be designed for all arterial streets including Highway 20/34. To keep the roadways from becoming overly wide, bicycle lanes are 4 feet in width and parking lanes are typically 6.5 feet in width. Wider bicycle lanes should be considered when adjacent to on-street parking on high-volume roadways. The State of Oregon Department of Transportation's *Bicycle and Pedestrian Plan and Design Manual* should be consulted when designing bicycle lanes. For overall consistancy of the city's transportation system, the TSP includes proposed land use revisions to integrate land use and development requirements with the revised street standards.

A major objective of the Philomath Transportation System Plan is to enable residents to achieve many destinations through alternative modes of transportation, not by moving faster, or further, in a single mode. These new street standards are intended to foster a more livable and balanced community transportation system. These standards integrate the mobility of each mode of travel into the city's community development process. Incorporating a wide variety of street design features into this process is a way to make the city's streets usable for all travel.

Street standards recommendations were developed by the Cascades West COG and are shown in the following table. Table 7-3 summarizes the recommended right-of-way and roadway width standards for state highways, county roads, and city streets in the Philomath UGB.

TABLE 7-3
RECOMMENDED
RIGHT-OF-WAY AND ROADWAY WIDTH STANDARDS

Classification	Minimum Right-of-Way Width (ft.)	Minimum Roadway Width (ft.)
Arterial Highways - One-way streets	70	46
Arterial Highways - Two-way streets	100	88
Arterials – Minor (non-highway)	60-80	41
Collector streets	63	36
Minor streets over 1,800 feet in length ,or that can be extended to such length	56	27
Minor streets under 1,800 feet in length that cannot be extended to such length	56	27
Cul-de-sac Street	56	27
Turnaround radius at end of cul-de-sac	45	37
Alley	20	12

ACCESS MANAGEMENT

Access management is an important tool for maintaining a transportation system. Too many access points can diminish the function of an arterial, mainly due to delays and safety hazards created by turning movements. Traditionally, the response to this situation has been to add lanes to the street. However, this can lead to increases in traffic and, in a cyclical fashion, require increasingly expensive capital investments to continue to expand the roadway.

Reducing capital expenditures is not the only argument for access management. Additional driveways along arterial streets lead to an increased number of potential conflict points between vehicles entering and exiting the driveway, and through traffic on the arterial streets. This not only leads to increased vehicle delay and deterioration in the level of service on the arterial, but also leads to reductions in safety.

Research has shown a direct correlation between the number of access points and collision rates. In addition, the wider arterial streets that can ultimately result from poor access management can diminish the livability of a community. Therefore, it is essential that all levels of government maintain the efficiency of existing arterial streets through improved access management.

Access Management Techniques

The number of access points to an arterial can be restricted through the following techniques:

- Restricting spacing between access points (driveways) based on the type of development and the speed along the arterial.
- Sharing of access points between adjacent properties.
- Providing access via collector or local streets where possible.
- Constructing frontage roads to separate local traffic from through traffic.

- Providing service drives to prevent spillover of vehicle queues onto the adjoining roadways.
- Providing acceleration, deceleration, and right-turn-only lanes.
- Offsetting driveways to produce T-intersections to minimize the number of conflict points between traffic using the driveways and through traffic.
- Installing median barriers to control conflicts associated with left-turn movements.
- Installing side barriers to the property along the arterial to restrict access width to a minimum.

Recommended Access Management Standards

Access management is hierarchical, ranging from complete access control on freeways to increasing use of streets for access purposes, parking, and loading at the local and minor collector level. Table 7-4 describes recommended general access management guidelines by roadway functional classification.

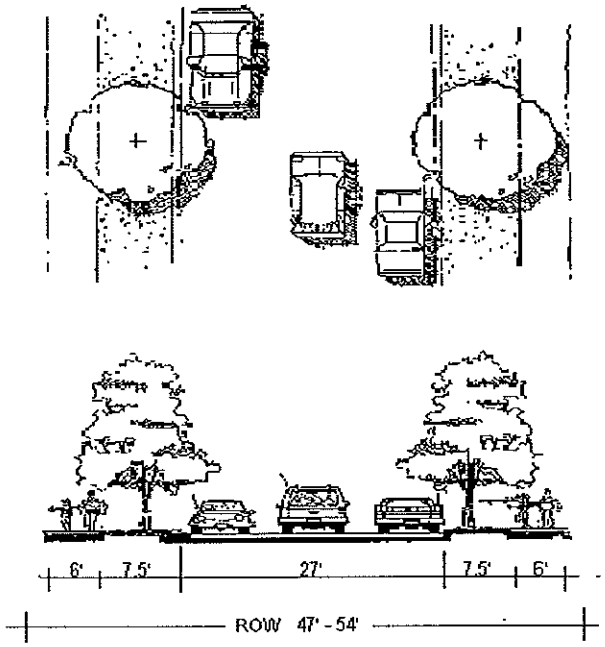
TABLE 7-4
RECOMMENDED ACCESS MANAGEMENT GUIDELINES

	Intersections					
Functional	**Public Road**		**Private Drive[2]**		**Signal**	**Median**
Classification	**Type[1]**	**Spacing**	**Type**	**Spacing**	**Spacing[3]**	**Control[4]**
Arterial						
Highway 20: Two-way general (1991 OHP Category 4)	at-grade	¼ mile	L/R Turns	500 ft.	½ mile	Partial
	at-grade	400 ft.	L/R Turns	100 ft.	400 ft.	na
West of 7th St. to east of 19th s Street (one-way)	at-grade	¼ mile	L/R Turns	300 ft.	¼ mile	None
Alsea Highway : General (1991 OHP Category 5)						
Collector	at-grade	250 ft.	L/R Turns	100 ft.	¼-½ mile	None
Residential Street	at-grade	250 ft.	L/R Turns	Access to Each Lot	na	None
Downtown Commercial	at-grade	250 ft.	L/R Turns	100 ft.	400 ft	None
Alley (Urban)	at-grade	100 ft.	L/R Turns	Access to Each Lot	na	None

[1]For most roadways, at-grade crossings are appropriate.
[2]Allowed moves and spacing requirements may be more restrictive than those shown to optimize capacity and safety. Any access to a state highway requires a permit from the ODOT District Office. Access will generally not be granted where there is a reasonable alternative access.
[3]Generally, signals should be spaced to minimize delay and disruptions to through traffic. Signals may be spaced at intervals closer than those shown to optimize capacity and safety, and on one-way couplets. Pedestrian crossing is often benefited by closer intervals of signal placing.
[4]Partial median control allows well-defined and channelized breaks in the physical median barrier between intersections. Use of physical median barriers can be interspersed with segments of continuous left-turn lanes, or, if demand is light, no median at all. Medians can be beneficial to crossing pedestrians.

FIGURE 7-2

Typical Low-Volume Residential Street
No Scale



Typical Medium-Volume
Residential/Collector St.- No Scale

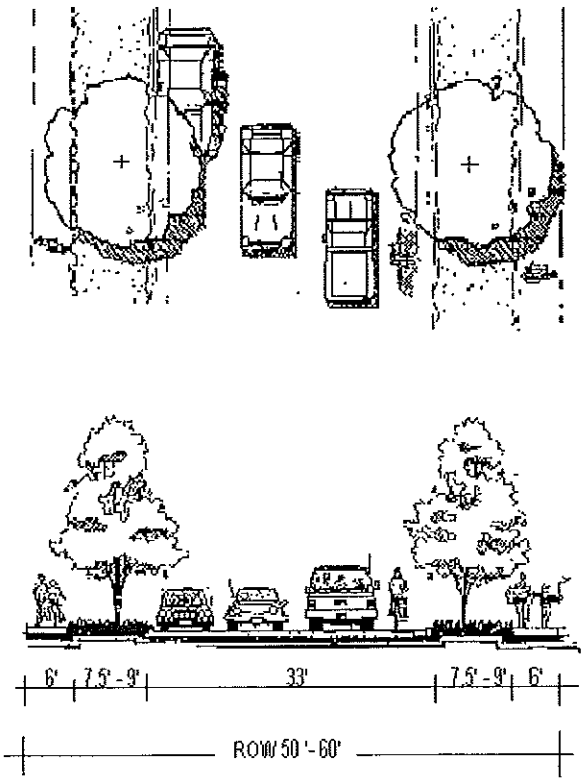
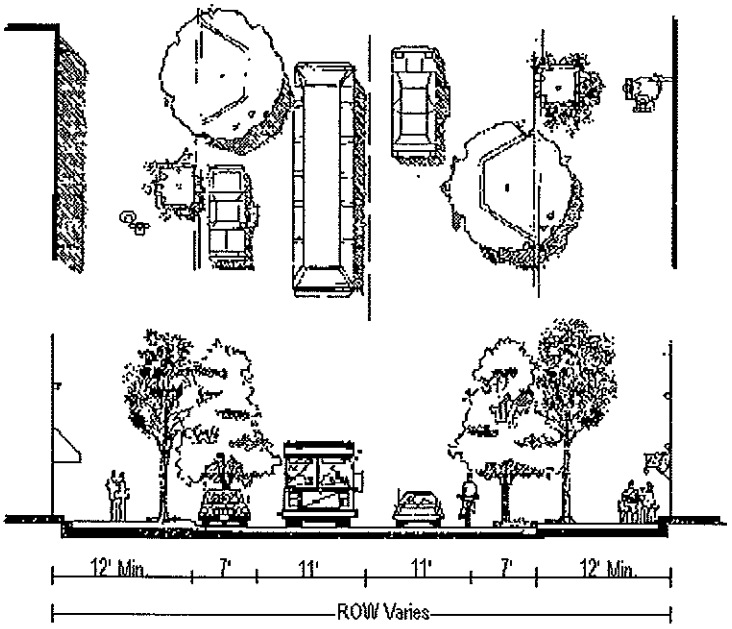
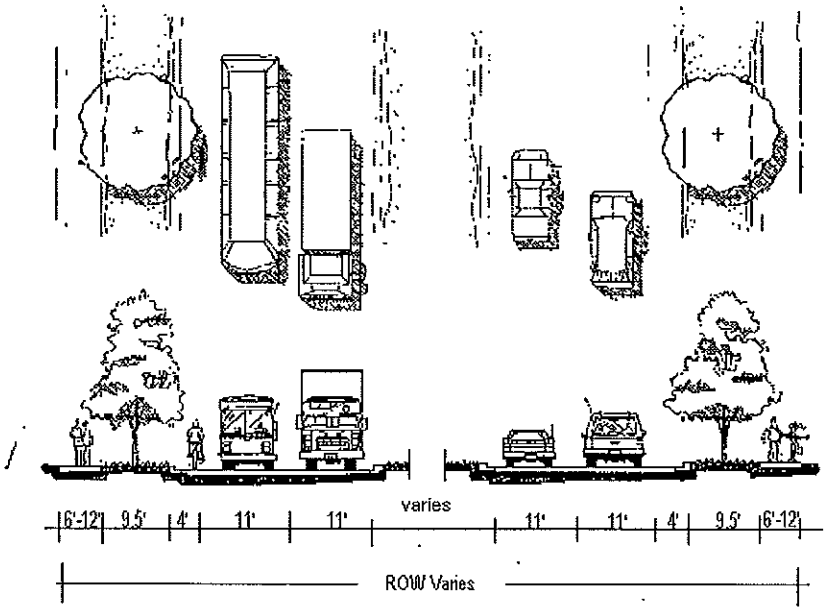


FIGURE 7-3

Typical Main Street Section - No Scale



Typical Couplet Street Section - No Scale



Application

These access management restrictions are generally not intended to eliminate existing intersections or driveways. Rather, they should be applied as new development occurs. Over time, as land is developed and redeveloped, the access to roadways should meet these guidelines. However, where there is a recognized problem, such as an unusual number of collisions, these techniques and standards can be applied to retrofit existing roadways.

To summarize, access management strategies consist of managing the number of access points and providing traffic and facility improvements. The solution is a balanced, comprehensive program that provides reasonable access while maintaining the safety and efficiency of traffic movement.

State Highways

Access management is important to promoting safe and efficient travel for both local and long distance users along Highway 20/34 through Philomath. The *1991 Oregon Highway Plan* (OHP) specifies an access management classification system for state facilities. Although Philomath may designate State highways as arterial roadways within its transportation system, the access management categories for these facilities should generally follow the guidelines of the *1991 Oregon Highway Plan*. This section of Philomath's Transportation System Plan describes the state highway access categories and specific roadway segments where special access areas may apply.

General

Highway 20/34 through Philomath is a state highway of statewide importance. Within the Philomath UGB, *Oregon Highway Plan* Category 4, "Limited Control"[1], applies the following guidelines:

> *These highway segments provide for efficient and safe medium-to-high-speed and medium-to-high-volume traffic movements on higher function interregional highway segments. They may also carry significant volumes of longer distance intracity trips. They are appropriate for routes passing through areas that have moderate dependence on the highway to serve land access and where the financial and social costs of attaining full access control would substantially exceed benefits. This category includes a small part of the statewide facilities and most regional facilities.*

ODOT's Category 4 policy states that the facility should maintain 500 feet between full-access private drives, 1/4 mile between public roads for urban/urbanizing sections of the highway, and traffic signal spacing of 1/2 mile or greater. Partial control of medians using barriers or raised curbs is provided. This classification permits at-grade intersections or interchanges at a minimum spacing of 1/4 mile.

The Alsea Highway, which borders Philomath's western UGB, is a state highway of district importance. Within the Philomath UGB, *Oregon Highway Plan* Category 5, "Partial Control"[1], applies the following guidelines:

> *These highway segments provide for efficient and safe slower-to-medium-speed and low-to-high volume traffic movements on intercity and intercommunity routes. This category will be assigned only where there is little value in providing high speed travel. Providing for reasonable and safe access to abutting property is a major purpose of this access category.*

The Category 5 policy states that the facility should maintain: 300 feet between full-access private drives; 1/4 mile between public roads for urban/urbanizing sections of highway; and, 1/4 mile or greater spacing between traffic signals. Median control is limited.

[1] 1991 *Oregon Highway Plan*, Appendix B, Table 1, Access Management Classification System.

One-Way Highway 20/34 Downtown

While the access management guidelines can be applied to some portions of Highway 20/34, the city has an established grid system through the downtown area, with most intersections spaced as closely as 400 feet apart. Neither the general access category for major arterial roadways nor the OHP Category 4 classifications can be practically met on these sections of the roadways. However, with the one-way couplet planned for the future the street, traffic signal, and access spacing standards for two-way highways are not applicable.

Oregon Highway Plan standards are too restrictive for areas with centralized commercial development, such as downtown Philomath. Shorter block lengths and a well-developed grid system are important to a downtown area, along with convenient and safe pedestrian facilities. In general, downtown commercial arterial streets typically have blocks 200 to 400 feet long, driveway access spacing as close as 100 feet, and, occasionally, signals spaced as close as every 400 feet. The streets in downtown areas must have sidewalks and crosswalks, along with on-street parking. The need to maintain these typical downtown characteristics must be carefully considered along with the need to maintain the safe and efficient movement of through traffic.

To address this issue, a one-way couplet is recommended along Highway 20/34 from west of 7th Street to east of 19th Street. To accommodate existing public roadway spacing and allow reasonable access spacing for private driveways, less restrictive access standards are recommended for this downtown area. Within the one-way couplet, access standards should allow intersection spacing at a minimum of 400 feet, driveway spacing at a minimum of 100 feet (see Table 7-4), and signal spacing as close as 400 feet.

A number of new traffic signals are proposed for construction in the downtown area as part of any one-way couplet alternative that may be implemented in Philomath. With the couplet, signals would be operated at the Main Street intersections with the Alsea Highway (proposed), 9th Street (proposed), 13th Street (existing), 19th Street (existing), and 26th Street (proposed). Spacing between these signals would be approximately 3,000 feet, 1,500 feet, 2,300 feet, and 3,300 feet, respectively. Only two of the signals would comply with the necessary 1/2 mile (2,640 feet) spacing required of two-way Category 4 facilities. However, the signals would comply with recommended guidelines for the downtown one-way couplet. Table 7-5 provides signal spacing guidelines that serve to optimize through traffic progression along a two-way arterial corridor based on signal cycle length and arterial travel speed. These guidelines should be observed for two-way highways where possible, realizing that closer spacing may be required to accommodate pedestrian activity or to improve capacity or safety operations. On a one-way street efficient traffic progression isn't dependent on intersection spacing and closer spacing of traffic signals is acceptable. Appropriate traffic signal traffic progression speeds can also be set on one-way couplets, whereas it can be seen from Table 7-5 that two-way streets don't allow for this flexibility.

TABLE 7-5
OPTIMUM SIGNALIZED INTERSECTION SPACING FOR EFFICIENT TRAFFIC PROGRESSION

	Speed (miles per hour)						
Cycle Length (seconds)	25	30	35	40	45	50	55
60	1,100 ft	1,320 ft	1,540 ft	1,760 ft	1,980 ft	2,200 ft	2,430 ft
70	1,280 ft	1,540 ft	1,800 ft	2,050 ft	2,310 ft	2,500 ft	2,820 ft
80	1,470 ft	1,760 ft	2,050 ft	2,350 ft	2,640 ft	2,930 ft	3,220 ft
90	1,630 ft	1,980 ft	2,310 ft	2,640 ft	2,970 ft	3,300 ft	3,630 ft
120	2,200 ft	2,640 ft	3,080 ft	3,520 ft	3,960 ft	4,400 ft	4,840 ft
150	2,750 ft	3,300 ft	3,850 ft	4,400 ft	4,950 ft	5,500 ft	6,050 ft

Source: *Technical Guidelines for the Control of Direct Access to Arterial Highways* - Volumes I and II, Federal Highway Administration (FHWA-RD-76-86).

MODAL PLANS

The Philomath modal plans have been formulated using information collected and analyzed through a physical inventory, forecasts, goals and objectives, and input from area residents. The plans consider transportation system needs for Philomath during the next 20 years assuming the growth projections discussed in Chapter 5. The changes in land use patterns and growth of the population will guide the timing for individual improvements in future years. Specific projects and improvement schedules may need to be adjusted depending on when and where growth occurs within Philomath.

Street System Plan

The street system plan recommends changes to the current street classification system and outlines a series of improvements that are recommended for construction within the City of Philomath during the next 20 years. These options have been discussed in Chapter 6 (Improvement Options Analysis). The proposed street system plan is summarized in Table 7-6 and the network is shown in Figure 7-1. In future updates or revisions of this TSP, changes in local zoning adjacent to Highway 20/34 and the designation of a Special Transportation Area (STA) in the downtown may be appropriate for the city to explore.

Truck Routing

Figure 7-4 shows the existing and proposed truck route system for Philomath. In addition to the proposed truck routes shown, trucks would also be expected to use the one-way couplet when constructed, and the West Hills Road extension to the Highway 20/34 intersection west of Philomath. It is not expected that either of these projects will be constructed in the near future. Improvements to 13th Street, south of Main Street, and to Grange Hall Road are included in the following list of street improvement projects and the *Benton County Draft TSP*.

Street Improvement Projects

Figure 7-5 and Table 7-6 presents street improvement projects that are also included in the street system plan. The projects are listed as short-range high priority (construction expected in the next 0 to 5 years), intermediate-range medium priority (construction expected in the next 5 to 10 years), and long-range lower priority (construction expected in the next 10 to 20 years). In addition to the projects shown in the following table there were some longer range projects that will be needed in the Philomath area. Figure 7-1 shows street network additions that will provide for street network continuity and will be needed based on expected future travel demands in the Philomath area. The right-of-way of these street additions should be acquired and the construction accomplished as development occurs.

The West Hills Road extension to the Highway 20/34 intersection west of Philomath was identified as a project that will be needed after the 20-year planning period for this TSP. The street improvements shown in Table 7-6 will not be adequate to serve expected demand much beyond this 20-year planning period unless the West Hills connection project is also constructed. The West Hills Road connection is shown as a future collector road in Figure 7-1 and is expected to have a total cost in the range of $10,000,000. Based on the public input, including comments from persons on the TTSC, this is a high priority future project to accommodate trucks and the future traffic demands.

Statewide Transportation Improvement Program (STIP) Projects

The Oregon Department of Transportation has a comprehensive transportation improvement and maintenance program encompassing the entire state highway system. The Statewide Transportation Improvement Program (STIP) identifies all the highway improvement projects approved for funding in Oregon. The STIP lists specific projects, the counties in which they are located, and their construction year.

The final 1998 to 2001 STIP, published in December 1997, identified no major highway improvements scheduled within Philomath's city limits or UGB. One project of local interest that falls just outside Philomath's southern UGB involves replacement of the Greasy Creek Bridge along Grange Hall Road. This structure (ODOT bridge No. 08108) is scheduled for construction in federal fiscal year 1999 at a cost of $402,000. Replacement of the structure should eliminate current truck load restrictions on the bridge.

TABLE 7-6
RECOMMENDED STREET PROJECTS

Proj No.	Project Description	Project Location	Project Phasing	Estimated Project Cost
	Street Improvement Projects			
1	Install Traffic Signal	Intersection of US Highway 20 and State Highway 34	Long-Range	$200,000
2	Install Traffic Signal	Intersection of Main St. and 9th St..	Intermediate-Range	Incl. in project #11 cost
3	Install Traffic Signal	Intersection of Main St. and 26th St..	Long-Range	$200,000
4	Bridge Improvement on Grange Hall Rd.	Greasy Creek Bridge	Short-Range	$620,000
5A	Truck Route Improvements along Grange Hall Rd.	Intersection of Grange Hall Rd. and Fern Rd. (Realign Fern Rd.)	Short-Range	$200,000
5B	Truck Route Improvements (Street Improvements with Bike Lanes)	13th St. (Between Chapel Dr & Main St.)	Intermediate-Range	$2,040,000
6	Access Improvement (Relocate Clemens Mill Rd. across from 26th St.)	Clemens Mill Rd. and 26th St. and Highway 20/34	Long-Range	$850,000
7	Extend (Connect) Newton St. to 26th St.	Between Dead End and 26th St.	Intermediate-Range	$130,000
8A	Street Overlay	Highway 20/34 (Between West City Limits and Newton Creek Bridge)	Intermediate-Range	$730,000
8B	Street Overlay	College Street (12th to 20th)	Short-Range	Incl. in project #10 cost
8C	Street Overlay	Grange Hall Rd. (Between Alsea Highway and Fern Rd.)	Intermediate-Range	$300,000
8D	Street Overlay	Mt. Union Ave. (Between Benton View Dr. and Plymouth Dr.)	Short-Range	$60,000
9	Improved Street Signing in the City	Within City Limits	Short-Range	$40,000
10	Widen Streets with Intersection Curb Extensions, Bike Paths, and Sidewalks	College St. (20th St. to 12th St.) and Applegate St. (20th St. to 11th St.)	Short-Range	$3,200,000
11	One-way Couplet with Additional Capacity Improvements	College/Main/Applegate St. One-Way Couplet along Hwy. 20/34	Intermediate-Range	$11,900,000
14	Extend Applegate St.. over Newton Creek	Between 23rd St. and 24th St.	Short-Range	$600,000

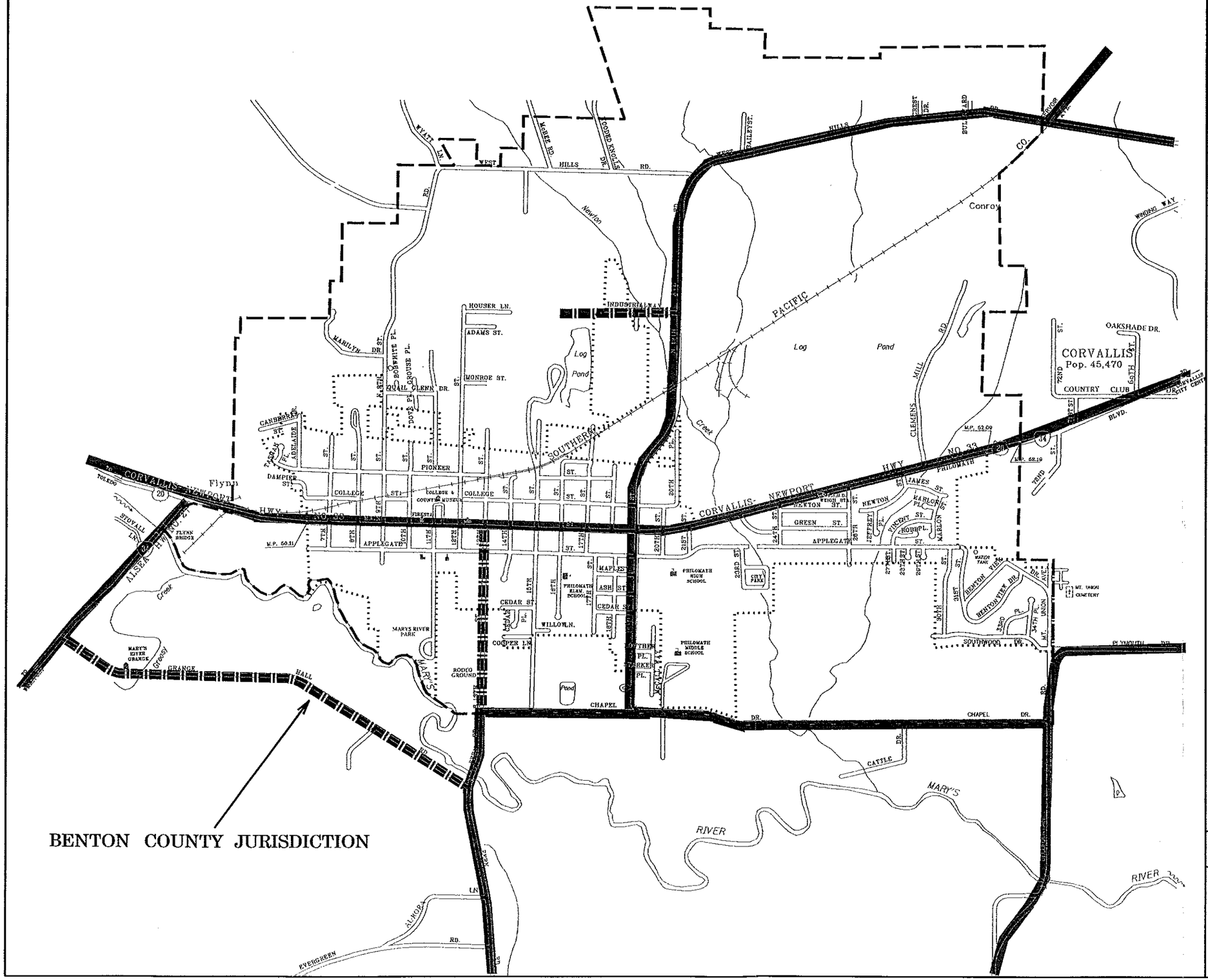
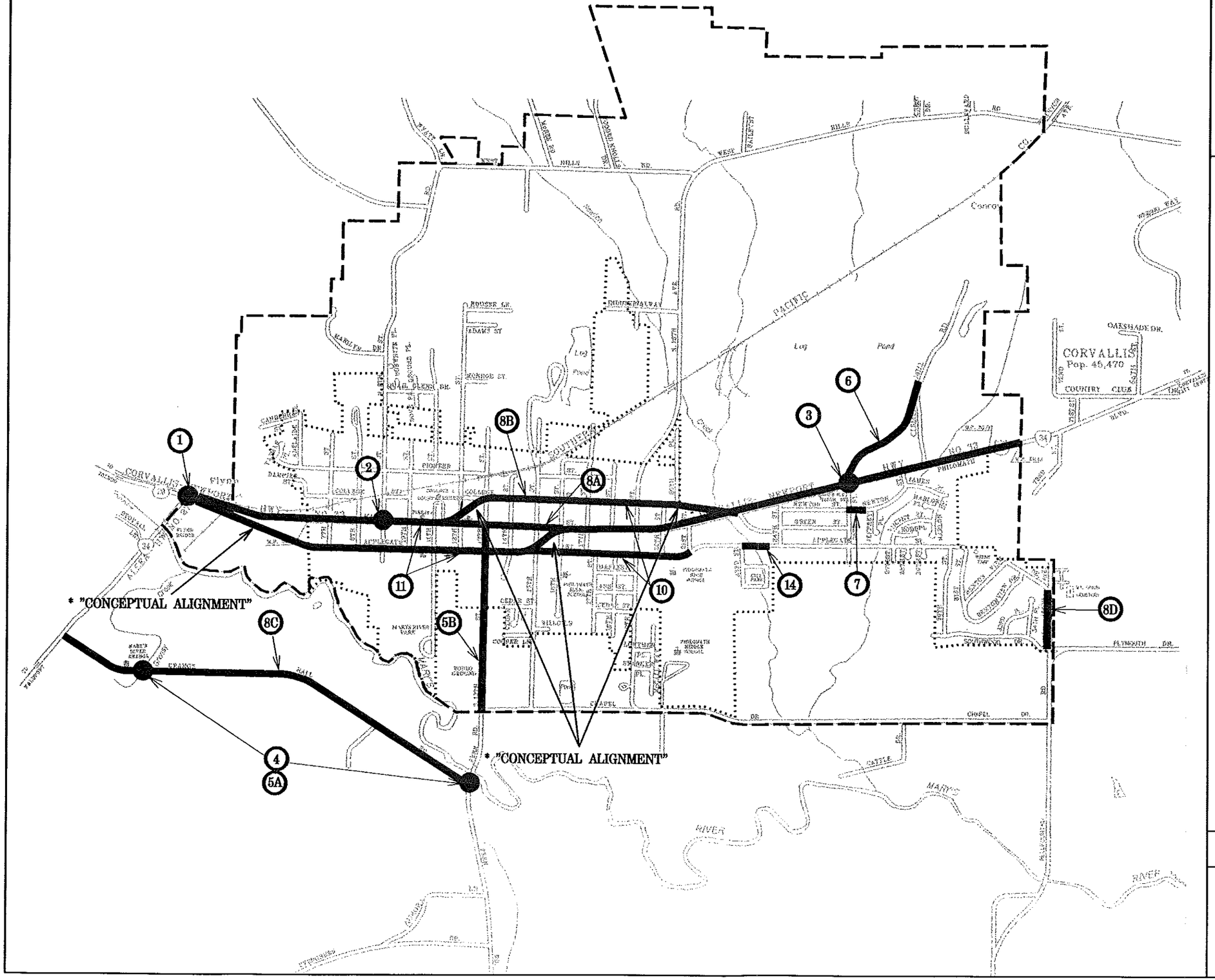


FIGURE 7–4

Proposed Truck Route System

ODOT0254/FIG7-2.DGN/TNT/06-16-98



(NOT TO SCALE)

LEGEND:

- U.G.B. LINE
- CITY LIMITS
- (1) PROJECT NUMBER
- PROJECT LOCATION FOR STREET OR INTERSECTION IMPROVEMENT
- * CROSSOVER ALIGNMENT NEEDS TO BE REFINED.

FIGURE 7–5

Recommended Street and Intersection Improvement Projects

ODOT0254/FIG7-4.DGN/JLSP/09-31-99

(NOT TO SCALE)

LEGEND:

- URBAN GROWTH BOUNDARY
- CITY LIMITS

EXISTING

- BIKE LANES *STRIPED AND SIGNED*
- SHOULDER BIKEWAY
- MULTI-USE PATH

RECOMMENDED

- B1 BIKE OR PEDESTRIAN IMPROVEMENT PROJECT NUMBER
- BIKE LANES *STRIPED AND SIGNED*
- MULTI-USE PATH

FIGURE 7-6

Recommended Bicycle and Pedestrian Improvement Projects

ODOT0254/FIG7-5.DGN/TNT/06-07-98

Pedestrian System Plan

A sidewalk inventory of major streets revealed that the downtown core of Philomath, excepting most of Main Street, has fairly intermittent sidewalk coverage, and is generally lacking curb cuts for wheelchair access. Many of the existing roadways outside of the downtown area also lack sidewalks and curb cuts, and where present, sidewalks are generally segmented.

The city has developed, and is in the third year of implementing, a comprehensive ten-year sidewalk development plan to address identified sidewalk deficiencies along roadways under its jurisdiction. Under the plan, all city streets with curb and gutter will be retrofitted with sidewalks as needed. Completion of the remaining seven years of the plan will result in the addition of approximately 4.1 miles of sidewalks to the existing sidewalk system between 1998 and 2005, significantly improving pedestrian access, safety, and connectivity throughout the city. Additionally, the city's subdivision ordinance requires installation of sidewalks for all new development.

The primary goal of the sidewalk development program is to improve pedestrian safety and connectivity; however, an effective sidewalk system has several qualitative benefits as well. Providing adequate pedestrian facilities increases the livability of a city. When pedestrians can walk on a sidewalk, separated from vehicular street traffic, it makes the walking experience more enjoyable and may encourage walking, rather than driving, for short trips. Sidewalks enliven a downtown and encourage leisurely strolling and window shopping in commercial areas. This "Main Street" effect improves business for downtown merchants and provides opportunities for friendly interaction among residents. It may also have an appeal to tourists as an inviting place to stop and walk around.

To fund the sidewalk development program, the city has a long-standing city ordinance (Ordinance No. 608) requiring all affected property owners to install and maintain, at owner expense, concrete sidewalks adjacent to and abutting city streets with curb and gutter. Therefore, the resulting cost to the city is nothing, as the cost is passed on to property owners. However, the city may need, or choose, to fund certain projects up front and establish conditions of repayment with property owners. For property owners, the cost will vary based on lot size and location. Typical residential properties will need to install sidewalks 5-feet wide, while properties in all business and commercial zones will need to construct sidewalks 10-feet wide. A typical unit cost for 5-foot wide concrete sidewalks with over two inches of aggregate is $30 per linear foot. Roughly double this number to $60 per linear foot for 10-foot wide sidewalks.

The city should ensure that its sidewalk design standards are compliant with the Americans with Disabilities Act (ADA) requirements (e.g., provide curb cuts at intersection crossings for wheelchair access). Additionally, the city should expand sidewalk coverage to all paved city roads in accordance with proposed street design standards presented previously in this chapter (these standards are still being developed).

By implementing those multi-use path projects identified in the *Master Philomath Bike Path and Trails Plan* and recommended under the Pedestrian Modal Plan element of this TSP, the city will significantly improve pedestrian safety and access to many of the community's valued resources, including parks, schools, and scenic areas such as the Marys River. Access to popular destinations in Corvallis, such as Avery Park, will also be expanded. The character of multi-use paths supports safe and leisurely use by people of all ages. These paths are not intended to replace the need for a safe and connective system of sidewalks and bike paths along the surrounding street system. Rather, the multi-use path supplements those facilities.

The Philomath Transportation Plan supports the goal of connecting the community to the public resource lands and trails to the north, particularly county-owned open space lands. The access road will also fulfill a goal of the Chinook Road District by providing a secondary emergency access from Philomath RFD and escape route for their residents. Connection to this resource will provide more travel options to the residents of Philomath,

Corvallis, and Benton County. Livability will be enhanced through this direct link to this recreation open space resource for the residents of Philomath.

Recommended multi-use path improvement projects are located on a map in Figure 7-6. Table 7-7 contains a list of specific multi-use path pedestrian improvements that will be needed over the next 20 years. Sidewalks should be added as new streets are constructed and existing streets reconstructed.

TABLE 7-7
RECOMMENDED PEDESTRIAN IMPROVEMENT PROJECTS

Pedestrian Improvement Projects	Project Location	Project Phasing	Estimated Cost
P1 - Multi-Use Path	From South 13th St. across the rodeo grounds to Marys River.	Short-Range	$150,000
P2 - Multi-Use Path	From Fern Rd. west along Marys River to the Alsea Hwy.	Long-Range	$320,000
P4 - Multi-Use Path	Extend Central Bike Path west to South 19th St.	Intermediate-Range	$200,000

In addition to these projects it is critical for future pedestrian mobility and safety to incorporate appropriate pedestrian design features in other projects. This is particularly important for highway projects with heavy traffic volumes. A complete list of pedestrian crossing strategies that may be applicable are included in Appendix F. Two important examples of strategies for future highway design are curb extensions and raised medians, discussed as follows.

TABLE 7-10
RECOMMENDED TRANSPORTATION IMPROVEMENT PROJECTS LIST
CITY OF PHILOMATH

Proj No.	Project Description	Project Location	Project Impacts			Project Justification					Project Phasing	Road Authority	Estimated Project Cost
			Vehicle	Bicycle	Pedestrian	Access	Economic	Safety	Operations	Upgrade			
	Street Improvement Projects												
1	Install Traffic Signal	Intersection of US Highway 20 and State Highway 34	■		■	✓		✓	✓	✓	Long-Range	State	$200,000
2	Install Traffic Signal	Intersection of Main St. and 9th St.	■		■	✓		✓	✓	✓	Intermediate-Range	State	incl. in project # 11 cost
3	Install Traffic Signal	Intersection of Main St. and 26th St.	■		■	✓		✓	✓	✓	Long-Range	State	$200,000
4	Greasy Creek Bridge and Intersection Improvements on Grange Hall Rd.	Greasy Creek Bridge	■	■	■		✓	✓	✓	✓	Short-Range	County	$620,000
5A	Truck Route Improvements along Grange Hall Rd.	Grange Hall Rd. and Fern Rd. Intersection (Realign Fern Rd.)	■			✓	✓	✓		✓	Short-Range	County	$200,000
5B	Truck Route Improvements (Street Improvement With Bike Lanes)	13th St. (Between Chapel Dr. and Main St.)	■			✓	✓	✓		✓	Intermediate-Range	County	$2,040,000
6	Access Improvements for Clemens Mill Rd.at Hwy. 20/34	Clemens Mill Rd. at Hwy. 20/34	■			✓		✓			Long-Range	State	$850,000
7	Extend Newton St. to 26th St.	Between Dead End and 26th St.	■	■	■	✓	✓	✓	✓		Intermediate-Range	City	$130,000
8A	Street Overlay	Highway 20/34 (Between West City Limits and Newton Creek Bridge)	■							✓	Intermediate-Range	State	$730,000
8B	Street Overlay	College St.(12th St. to 20th St.)	■	■				✓		✓	Short-Range	City/State	incl. In project # 10 cost
8C	Street Overlay	Grange Hall Rd. (Between Alsea Highway and Fern Rd.)	■	■				✓		✓	Intermediate-Range	County	$300,000
8D	Street Overlay	Mt. Union Ave. (Between Benton View Dr. and Plymouth Dr.)	■	■						✓	Short-Range	County	$60,000
9	Improved street name signing in the City	Within City Limits	■				✓	✓	✓	✓	Short-Range	City	$40,000
10	Widen Streets with Intersection Bulb-Outs, Bike Paths and Sidewalks	College St.(12th St. to 20th St.) and Applegate St.(11th St. to 20th St.)	■	■	■	✓	✓	✓	✓	✓	Short-Range	City/State	$3,200,000
11	One-Way Couplet with Additional Capacity Improvements	One-Way Couplet on College/Main/Applegate Streets	■	■	■	✓	✓	✓	✓	✓	Intermediate-Range	State	$11,900,000
14	Extend Applegate St. over Newton Creek (Bridge)	Between 23rd St. and 24th St.	■			✓	✓	✓	✓		Short-Range	City/State	$600,000
	Bicycle Improvement Projects												
	Add Bike Lanes "Striped and Signed"	College/Main/Applegate Couplet Alignment (Between West/East UGB)		■		✓		✓			Intermediate-Range	State	incl. in project # 11 cost
B1	Add Bike Lanes "Striped and Signed"	South 19th St. (between College St. and Chapel Dr.)		■		✓		✓			Short-Range	County	$320,000
B2	Add Bike Lanes "Striped and Signed"	Plymouth Dr. to Central Bike Path via Southwood Dr./30th St./Applegate St.		■		✓		✓			Short-Range	City	$5,000
B3	Add directional 6-foot multi-use paths	Chapel Dr. (between 13th St. and Bellfountain Rd.)		■	■	✓		✓			Intermediate-Range	County	$820,000
B4	Add Bike Lanes "Striped and Signed"	13th St. (Between Chapel Dr. and Main St.)		■		✓		✓			Intermediate-Range	County	incl. in project # 5B cost
B5	Stripe and Sign Existing Roadway for Bike Lanes	Applegate St. (between proposed couplet and Central Bike Path)		■		✓		✓			Intermediate-Range	City	$5,000
B7	Add Bike Lanes "Striped and Signed"	West Hills Rd. (between Wyatt Ln. and North 19th St.)		■		✓		✓			Long-Range	County	$770,000
	Pedestrian Improvement Projects												
P1	Multi-Use Path	South 13th St. across Rodeo Grounds to Marys River		■	■	✓		✓			Intermediate-Range	City	$150,000
P2	Multi-Use Path	Fern Rd. paralleling Marys River to the Alsea Hwy		■	■	✓		✓			Long-Range	City	$320,000
P4	Multi-Use Path	Extend Central Bike Path to South 19th St.		■	■	✓		✓			Intermediate-Range	City	$200,000
	Transit, Rail, Air, Water and Pipeline Projects												
	Rail siding and spur	Willamette & Pacific Railroad at Georgia Pacific	■			✓	✓		✓	✓	Short-Range	Railroad	$250,000
	Intermodal Freight Transfer Station	South of Corvallis/Philomath area	■			✓	✓		✓	✓	Long-Range	Railroad	
	Short Range = Next 5 Years												$5,295,000
	Intermediate Range = 5-10 Years												$16,275,000
	Long Range= 10-20 Years												$2,340,000
	Total												$23,910,000

Curb Extensions

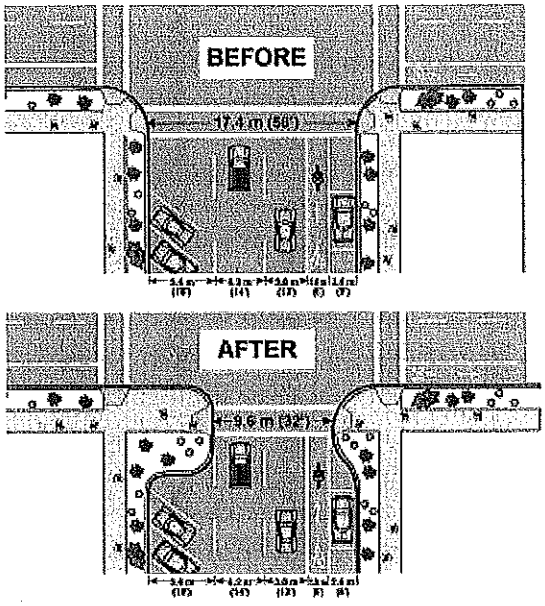


Figure 7-7: Curb extensions reduce crossing distance

Curb extensions, also known as bulbouts, neckdowns, flares or chokers, reduce the pedestrian crossing distance and improve the visibility of pedestrians by motorists. Curb extensions should be considered at all intersections where on-street parking is allowed. The crossing distance savings are greatest when used on streets with diagonal parking. On arterials and collectors, space should be provided for existing or planned bike lanes.

Reducing pedestrian crossing distance improves signal timing, if the pedestrian-crossing phase controls the signal. The speed normally used for calculating pedestrian crossing time is 1.2 m (4 ft)/sec., or less where many older pedestrians are expected. The time saved is substantial when two corners can be treated with curb extensions.

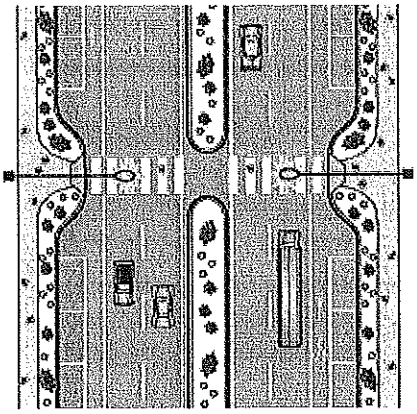


Figure 7-8: Mid-block curb extension with medians and illumination

Non-signalized intersections also benefit from curb extensions, reducing the time pedestrians are in a crosswalk improves pedestrian safety and vehicle movement.

Mid-block curb extensions may be considered where there are current or anticipated pedestrian generated land uses on both sides of the road.

Raised Medians

These benefit pedestrians on two-way, multi-lane streets, as they allow pedestrians to cross only one direction of traffic at a time; it takes much longer to cross four lanes of traffic than two. Where raised medians are used for access management, they should be constructed so they provide a pedestrian refuge.

Where it is not possible to provide a continuous raised median, island refuges can be created between intersections and other accesses. These should be located across from high pedestrian generators, such as schools, parks, municipal buildings, parking lots, etc.

In most instances, the width of the raised median is the width of the center turn-lane. Ideally, raised medians should be constructed with a smooth surface, such as brick pavers. Medians should be landscaped with the plants low enough so they do not obstruct visibility, and spaced far enough apart to allow passage by pedestrians.

Bicycle System Plan

The goal of the *Master Philomath Bike Path and Trails Plan* is to "link parks, open spaces, schools, and residential areas via a system of trails and bike paths." Projects supporting this goal should reduce conflicts between bicyclists and motorized vehicular traffic, develop a system dedicated to bicycles, and provide opportunities for recreational bicycle use. The city's bike plan identifies seven projects that build upon the existing system of bike lanes, multi-use paths, shoulder bikeways, and shared roadway facilities already in use in Philomath. These projects would substantially improve the interconnection of parks, open spaces, schools, and residential areas in and around the Philomath community.

Shared roadways, where bicyclists share normal vehicle lanes with motorists, are generally acceptable if speeds and traffic volumes are relatively low. On the local streets in Philomath, shared roadways are not an issue; however, on collector and arterial roadways, bike lanes are recommended.

TABLE 7-8
RECOMMENDED BICYCLE PROJECTS

Proj. No.	Bicycle Improvement Projects	Project Location	Project Phasing	Estimated Cost
	Add Bike Lanes "Striped and Signed"	College/Main/Applegate Couplet Alignment (Between West/East UGB Limits)	Intermediate-Range	Incl. in project 11 cost
B1	Add Bike Lanes "Striped and Signed"	South 19th St. (between College St. and Chapel Dr.)	Short-Range	$320,000
B2	Add Bike Route "Signed"	Plymouth Dr. to Central Bike Path (via Southwood Dr./30th St./Applegate St)	Short-Range	$5,000
B3	Add Directional 6-foot Multi-Use Paths	Chapel Dr. (between 13th St. Bellfountain Rd.)	Intermediate-Range	$820,000
B4	Add Bike Lanes "Striped and Signed"	South 13th St. (Between Chapel Dr. and Main St.)	Intermediate-Range	Incl. in project # 5B cost
B5	Stripe and Sign Existing Roadway for Bike Lanes	Applegate St. (between proposed couplet and Central Bike Path.)	Intermediate-Range	$5,000
B7	Add Bike Lanes "Striped and Signed"	West Hills Rd. (between Wyatt Lane and North 19th St.)	Long-Range	$770,000
	Short Range (Next 5 Years)			$325,000
	Intermediate Range (5-10 Years)			$1,595,000
	Long Range (10-20 Years)			$770,000
	Total			$2,690,000

Highway 20/34 functions as an arterial street through Philomath, which means that it should have bike lanes on both sides of the street as required by the TPR. Accident statistics on the highway do not indicate that there are frequent conflicts between bicyclists and motorized vehicles in Philomath. To install bicycle lanes along Highway 20/34 would involve removing on-street parking through downtown Philomath. Shoulders would need widening on sections where no on-street parking exists. Some of these improvements would be expensive and others would be controversial. At the present time, no specific bikeway improvements are recommended for Highway 20/34; however, bicycle lanes are recommended as part of the future one-way couplet project.

Bicycle parking is generally lacking in Philomath. Bike racks should be installed in front of downtown businesses and all public facilities (schools, post office, library, city hall, and parks). Typical rack designs cost about $50 per bike plus installation. An annual budget of approximately $1,500 to $2,000 should be established so that Philomath can begin to place racks where needs are identified and to respond to requests for racks at specific locations.

Transportation Demand Management Plan

Through Transportation Demand Management (TDM), peak travel demands can be reduced or spread to more efficiently use the transportation system, rather than building new or wider roadways. Techniques that have been successful and could be initiated to help alleviate some traffic congestion include carpooling and vanpooling, alternative work schedules, bicycle and pedestrian facilities, and programs focused on high density employment areas.

In Philomath, where traffic volumes are relatively low and the population and employment is small, implementing TDM strategies is not practical in most cases. However, the sidewalk and bikeway improvements recommended earlier in this chapter are also considered TDM strategies. By providing these facilities, the City of Philomath is encouraging people to travel by other modes than the automobile. In rural communities, TDM strategies include providing mobility options.

Because intercity commuting is a factor in Benton County, residents who live in Philomath and work in other cities, such as Corvallis, should be encouraged to carpool with fellow coworkers or someone who works in the same area. Implementing a local carpool program in Philomath alone may not be practical because of the city's small size; however, a countywide carpool program or intercity carpool program with Corvallis is possible. The City of Philomath should support state and county carpooling and vanpooling programs that could further boost carpooling ridership.

No costs have been estimated for the TDM plan. Grants may be available to set up programs; other aspects of Transportation Demand Management can be encouraged through ordinance and policy.

Public Transportation Plan

Local public transportation in Philomath consists of Dial-A-Bus service for senior citizens and the disabled. There are also several other on-demand services available to the disadvantaged in Benton County. Regional service is provided in Corvallis and Albany by the Valley Retriever and Greyhound. The Valley Retriever has three round-trips daily between Newport, Philomath, Corvallis, and Albany.

Intercity connections and senior citizen and disabled public transportation should be maintained; increased usage of these services should be encouraged. Bus stops should also be considered as part of the proposed one-way couplet improvement project.

The city has no local fixed-route transit service at this time. The small size and low-traffic volumes on city streets indicate that mass transit is neither necessary nor economically feasible at this time. The Transportation Planning Rule exempts cities of less than population 25,000 from developing a transit system plan or a transit feasibility study as part of their TSPs. However, Philomath is expected to be part of a combined Corvallis/Philomath Metropolitan Planning Organization (MPO) within the next several years when the area population exceeds 50,000 people. It is expected that fixed-route transit service may be provided in Philomath during the next 20 years by the Corvallis Transit System. This would be expected to start after the area becomes a MPO with further development in the west Corvallis area. Philomath can plan for future transit services with growth patterns that support rather than discourage transit use in the future.

The existing Valley Retriever line and Dial-A-Bus services already meet the required daily trip to a larger city specified for communities the size of Philomath in the Oregon Transportation Plan.

No costs have been estimated for this modal plan. A Linn/Benton Transit Feasibility Study is currently being conducted. It is expected that this study will result in recommending any needed transit projects in Philomath in the next 20 years. If Philomath transit projects are identified as part of the feasibility study, the projects should be included in the next update of this Philomath TSP.

Rail Service Plan

The nearest available passenger rail service is the Amtrak service located in the city of Albany. Although there has been considerable discussion of regular passenger rail service to Philomath, it has not been found to be economically feasible by the current railroad operator and is not included in this plan.

The Willamette & Pacific Railroad provides daily freight rail service to Philomath. Freight service is provided west to Toledo, east to Corvallis, and north and south from Corvallis. With the recent crossing improvements, the tracks are in good condition and it is anticipated that class 2 standards may be met (30 mph) in Philomath. There are two projects needed within the 20-year planning period for this plan. One is a short-term project to provide siding and spur tracks at the Georgia Pacific mill.

The other needed project is an intermodal freight transfer station. This is a long-range project expected to cost approximately $1,000,000. There has been considerable discussion about where to locate the intermodal transfer station and it appears that the most feasible location may be south of Corvallis instead of in the Philomath area. The wetlands in the other industrial areas and the topography in the northwestern sections of Philomath would not be feasible locations for a transfer station. Since this facility would most likely be located outside the Philomath UGB, it is not included in the costs for the Philomath TSP.

TABLE 7-9
RECOMMENDED RAILROAD SYSTEM PROJECTS

Location	Project	Project Phasing/Priority	Cost
Georgia Pacific Mill	Delivery Siding and Spur Tracks	Short-Range/High	$250,000
South of Corvallis	Intermodal Freight Transfer Station	Long-Range/Medium	$1,000,000
Subtotal High Priority Projects			$250,000
Subtotal Medium Priority Projects			$1,000,000
Subtotal Low Priority Projects			
TOTAL COST (Philomath TSP)			$250,000

Note: The Freight Transfer Station project will most likely be outside the UGB and is not included in the Total Cost

Air Service Plan

The Corvallis Municipal Airport is located approximately five miles southeast of Philomath. There are limited commercial flights to the airport at this time. The nearest commercial air service with regularly scheduled flights is in Eugene. Shuttle service to the Portland International Airport is available from Corvallis. Future needs and conditions are appropriately addressed as part of the city of Corvallis plans (TSP and Corvallis Municipal Airport Master Plan).

Pipeline Service Plan

There are currently no significant pipelines serving Philomath.

Water Transportation Plan

Philomath has no waterborne transportation services.

TRANSPORTATION SYSTEM PLAN IMPLEMENTATION PROGRAM

Implementation of the Philomath Transportation System Plan will require both changes to the city's comprehensive plan and zoning code and preparation of a 20-Year Capital Improvement Plan. These actions will enable Philomath to address both existing and emerging transportation issues throughout the urban area in a timely and cost effective manner.

The Capital Improvement Plan (CIP) is discussed as part of the next chapter titled, "Funding Options and Financial Plan." The purpose of the CIP is to detail what transportation system improvements will be needed as Philomath grows and provide a process to fund and schedule the identified transportation system improvements. It is expected that the Transportation System Plan Capital Improvement Plan can be integrated into the existing city CIP, the Benton County CIP, and the ODOT STIP. This integration is important since the Transportation System Plan proposes that all three governmental agencies will fund some of the transportation improvement projects. A complete list of the recommended projects for this transportation system plan is included in Table 7-10.