CHAPTER 3: TRANSPORTATION SYSTEM INVENTORY

As part of the planning process, an inventory was conducted of the existing transportation system in the City of Philomath. The City of Philomath public works staff assisted the consultant in providing information and data for the inventory. This inventory included the street system as well as the bicycle, pedestrian, public transportation, rail, air, water, and pipeline systems.

STREET SYSTEM

An existing street system inventory was conducted for all arterials, collector streets, and other key local streets within Philomath. Inventory elements include:

- Street classification and jurisdiction;
- Speed limits;
- Street width and right-of-way;
- Number of travel lanes;
- Presence of on-street parking, sidewalks, or bikeways;
- Presence of street shoulders or curbs; and
- General pavement conditions.

Figure 3-1 illustrates the roadway functional classification, as well as the location of traffic signals. Appendix D lists a complete inventory.

State Highways

Discussion of the Philomath street system must include the state highways that traverse the planning area. Although the City of Philomath has no direct control over the state highways, adjacent development, as well as traffic patterns, are heavily influenced by the highways. Philomath is served primarily by two state highways: US 20 and OR Highway 34. These two highway routes join together west of town to form Highway 20/34, which traverses through the heart of the city on Main Street, continuing northeast to the city of Corvallis.

The *1991 Oregon Highway Plan* (OHP) classifies the state highway system into four levels of importance (LOI): interstate, statewide, regional, and district. ODOT has established primary and secondary functions for each type of highway and objectives for managing the operations of each one.

Within the Philomath planning area, US 20 and its continuance as Highway 20/34 through the city is designated as a highway of statewide importance. According to the OHP, the primary function of a statewide highway is to "provide connections and links to larger urban areas, ports, and major recreation areas that are not served directly by interstate highways." A secondary function is to "provide links and connections for intra-urban and intra-regional trips." The emphasis on this type of highway is to "provide for safe and efficient high-speed continuous-flow operation in rural areas and high- to moderate-speed operations with limited interruptions of flow in urban and urbanizing areas." This means that design factors such as controlling access and facilitating the movement of highway traffic efficiently are of primary importance.

OR Highway 34 between Philomath and Waldport is designated as a district level highway. The primary function of a district level highway, according to the OHP, is to "serve local traffic and land access," with emphasis on providing "high-speed continuous-flow operation in rural areas" and "moderate- to low-speed operation in urban or urbanizing areas with a moderate to high level of interruptions to traffic flow. Both of these highways are important routes for through as well as local truck trips. The truck routing and movement of freight are important transportation elements in this TSP.

STREET CLASSIFICATION

The City of Philomath has classified its street system at four levels: major and minor arterials, major collector streets, and local streets. The classification includes state, county, and city roadways.

Arterial Streets

Arterial streets form the primary roadway network within and through a region. They provide a continuous road system, which distributes traffic between regions, districts, and neighborhoods. Generally, arterial streets are high-capacity roadways that carry high traffic volumes with minimal localized activity.

In Philomath, Highway 20/34 (Main Street) is classified as a major arterial. Most of the commercial development in the city occurs along this arterial. It is a three-lane facility with a continuous left-turn lane and intermittent on-street parking between the western city limits and 19th Street. Outside this area the highway is a rural two-lane roadway with no on-street parking. OR Highway 34 (Alsea Highway) is a rural two-lane roadway with no on-street parking and is classified as a minor arterial in the Benton County draft TSP.

Collector Streets

Collector streets connect local neighborhoods or districts to the arterial network. Within the UGB, Philomath has only six designated collector streets. They are as follows:

- North 9th Street
- 19th Street
- West Hills Road
- Chapel Drive
- Bellfountain Road (Between Chapel Drive and Plymouth Drive)
- 13th Street

Other collector roads outside the UGB, which have direct transportation impacts for the city, are:

- Reservoir Avenue
- West Hills Road (East of Reservoir Avenue)
- Plymouth Drive
- Grange Hall Road

Local Streets

Local streets form most of the street system in Philomath. They are designed to carry low traffic volumes, which are associated with the local uses that abut them. In Philomath, the local streets help form part of the street grid system. "

STREET LAYOUT

The majority of the Philomath streets are positioned in a grid system. Block sizes vary but are typically 380 feet square. The only area where the street system does not follow a grid-like pattern is in the two residential neighborhoods in the southeastern sector of the city. The placement of winding turns and cul-de-sacs in these neighborhoods is due to natural features such as a creek and hilly terrain.

Highway 20/34 passes through the heart of the city along Main Street in an east-west direction, with intersecting north-south collector streets at 9th Street, 13th Street, and 19th Street.

ROADWAY SAFETY

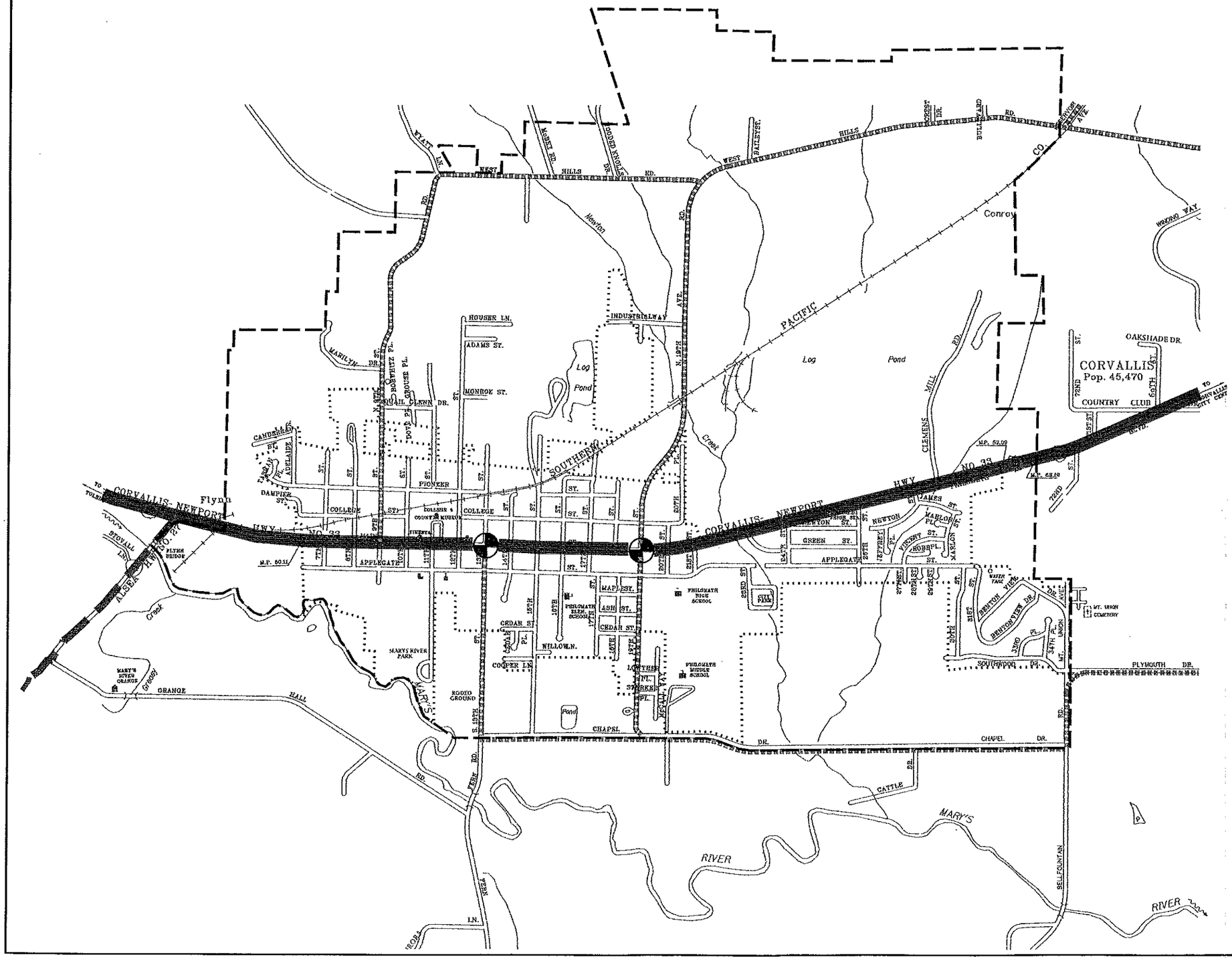
Accident data within the Philomath city limits were reviewed to identify a select list of locations with potential accident patterns and associated safety concerns. The three sources of accident data reviewed included:

- Accident-specific summaries generated by ODOT's Transportation Development Branch for the three-year period from January 1, 1994, to December 31, 1996; and,
- Accident summaries generated from the ODOT Accident Summary Database for locations along OR Highway 34 in Philomath.
- Philomath police department traffic crash data from January 14, 1985, to November 10, 1997.

ODOT's Accident Summary Database calculates two useful factors for comparison with statewide statistics based on accident information over the three-year period studied. The first factor is a computed average three-year accident rate, which compares the number of accidents with the average daily traffic (ADT) volume and the length of the segment analyzed. The second factor is the Safety Priority Index System (SPIS) value. This factor evaluates accident frequency, severity, and traffic volumes to create an index for prioritizing state highway locations with safety concerns.

Summary

Table 3-1 lists the four locations that were identified as Philomath high SPIS and/or high-number accident locations based on ODOT accident summary data.



(NOT TO SCALE)

LEGEND:

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

FIGURE 3-1

Existing Street Classifications and Traffic Signals

ODOT0254/FIG3-1.DGN/TNT/08-20-98

TABLE 3-1
PHILOMATH ACCIDENT SUMMARY

Intersection Location	High Accident Number Location[1]	High SPIS Location[2]
Main Street & 19th Street	Yes	Yes
Main Street & 21st Street	Yes	
Main Street & Newton Street	Yes	
Applegate Street & 13th Street	Yes	

[1] Based on ODOT Accident Summaries Database - locations with four or more reported accidents during 1994-1996 period.
[2] Based on ODOT Accident Summary Database 1997 SPIS cutoff value of 42.67 for state highway locations.

Pedestrian Accidents

No ODOT recorded pedestrian accidents occurred in Philomath during the three-year period considered.

Historic Accident Rates

Table 3-2 shows the historic accident rates for US 20 in Philomath, as well as the Oregon statewide average for urban non-freeway primary state highways, from January 1, 1994, to December 31, 1996. The accident rate for US Highway 20 was well below the statewide average for similar highways in 1994 and 1995 but was about the statewide average in 1996.

TABLE 3-2
HISTORIC ACCIDENT RATES FOR STATE HIGHWAYS IN PHILOMATH
(Accidents Per Million Vehicle Miles Traveled)

Highway	1996	1995	1994
US Highway 20			
Philomath urban area (MP 50.11 to MP 52.09)	3.73	2.64	2.75
Average for all Urban Non-freeway Primary State Highways	3.63	3.98	3.45

Source: Oregon Department of Transportation Accident Rate Tables.

Accident Locations (ODOT Records)

Philomath high-number accident locations were chosen based on a review of ODOT-generated accident summaries. All accident locations within the Philomath city limits were considered. Those locations experiencing four or more reported accidents during the three-year period from January 1, 1994, to December 31, 1996, were identified as Philomath high-number accident locations and were further analyzed to determine if accident patterns or other safety-related issues were represented by the data. The four Philomath high-number accident locations, along with summary information provided from the ODOT accident summaries, are presented in Table 3-3. Supplementary accident information is presented for each location.

TABLE 3-3
HIGH-ACCIDENT LOCATION SUMMARY
(January 1, 1994, to December 31, 1996)

Intersection Location	Fatalities	Injuries	Property Damage Only	Total Accidents
Main Street (MP 51.04) & 19th Street	0	14	7	15[1]
Main Street (MP 51.18) & 21st Street	0	10	1	6
Main Street (MP 51.82) & Newton Street	0	3	2	4
Applegate Street & 13th Street	0	3	2	4
Total	**0**	**30**	**12**	**29**

[1] Three of the 15 accidents were rear-end type accidents that were coded as occurring approximately 50 feet west of the intersection but were considered related to the operations of this intersection.

Source: Oregon Department of Transportation *Accident Summary Database Investigative Report.*

Main Street (US Highway 20) and 19th Street

Fifteen accidents were reported at this signalized intersection during the three-year period considered, resulting in fourteen injuries. Most accidents (11) occurred during daylight hours and four occurred under wet or icy pavement conditions. Accident types were divided among angle (1), turning (3), rear-end (10), and other maneuver (1) accidents. The primary accident type involved rear-end accidents--six eastbound and four westbound along Main Street. In each rear-end accident, the driver error involved drivers either following too closely or traveling too fast to properly stop. The ODOT Accident Summary Database lists this intersection as a high SPIS location (top ten percent of some 14,000 SPIS locations statewide). Its SPIS value of 46.45 for the 1994 to 1996 period exceeds the 1997 cutoff value of 42.67.

Potential Solutions: Short-term improvements to help reduce rear-end accidents could include improved advance signing to caution drivers of an upcoming intersection/traffic signal and/or adjustment of clearance intervals (yellow signal) to reduce abrupt stops.

Main Street (US Highway 20) and 21st Street

Six accidents were reported at this unsignalized T-intersection during the three-year period considered, resulting in ten injuries. Most accidents (5) occurred during daylight hours and one occurred under wet or icy pavement conditions. Accident types were divided among turn (2) and rear-end (4) accidents. The primary accident type involved rear-end accidents--two eastbound and two westbound along Main Street. In each accident, the error involved drivers either following too closely or traveling too fast to properly stop. The accident summaries provided no definitive patterns in accident characteristics to suggest that specific intersection operations (signing, striping, etc.) were a contributing factor in any of the accidents. Although driver sight distance for vehicles properly stopped at the existing stop line (measured 21 feet back from the highway edge line) on 21st Street is adequate to the west, it is only adequate approximately 350 feet to the east. Existing street name signs with black lettering on a white background can be difficult to read, except when very near the sign. Changing to white lettering on a green background (Section 2D-39, MUTCD) could improve driver recognition from further distances, which would likely reduce abrupt stops. This would also provide better notification at the busy intersection used as a route to schools.

Potential Solutions: Since the inventory was done, the intersection has been restriped with a new stop line. A short-term improvement to help reduce rear-end accidents could include enlarged and/or relocated street name signing to improve visibility to drivers.

Main Street (US Highway 20) and Newton Street

Four accidents were reported at this unsignalized T-intersection during the three-year period considered, resulting in three injuries. Most accidents (3) occurred during daylight hours and one occurred under wet or icy pavement conditions. Accident types were divided among turn (1), fixed-object (1), and rear-end (2) accidents. The primary accident type involved rear-end accidents--two eastbound and two westbound along Main Street. In each accident, the error involved drivers either following too closely or traveling too fast to properly stop. The accident summaries provided no definitive patterns in accident characteristics to suggest that specific intersection operations (signing, striping, etc.) were a contributing factor in any of the accidents. Obscured sight may have contributed to at least one accident. Sight distance for properly stopped vehicles at the current stop line location, measuring 20 feet back from the highway edge line on Newton Street, is limited.

Existing street name signs with black lettering on a white background can be difficult to read except when very near the sign. Changing to white lettering on a green background (Section 2D-39, MUTCD) could improve driver recognition from further distances, which would likely reduce abrupt stops.

Potential Solutions: A short-term improvement could include movement of the stop line nearer the intersection to increase sight distance to approximately 1,000 feet in each direction. Another short-term improvement to help reduce rear-end accidents could include enlarged and/or relocated white and green street name signing to improve visibility to drivers and/or warning signs of an upcoming side street.

Applegate Street and 13th Street

Four accidents were reported at this intersection during the three-year period considered, resulting in three injuries. All accidents occurred during daylight hours and two occurred under wet or icy pavement conditions. All accidents involved angle-type maneuvers by drivers, specifically a "failure to properly yield the right-of-way." The accident summaries provided no definitive patterns in accident characteristics to suggest that specific intersection operations (signals, signing, striping, etc.) were a contributing factor in any of the accidents.

Potential Solutions: Short-term improvements could include raising or relocating stop signs to improve driver visibility. Additional improvements could include movement of stop lines nearer the intersection and/or restriction of on-street parking near the intersection to improve driver sight distance.

Philomath Police Department Traffic Crash Locations

Traffic crash statistics provided by the City of Philomath for the time period between January 14, 1985, and November 10, 1997, were also reviewed. In addition to the ODOT high-number accident intersections, there were three more intersections in the Philomath Police Department traffic crash statistics that had ten or more crashes in the approximately 13 years covered.

Applegate Street and 19th Street

This intersection had 15 traffic crashes recorded in the police records. It currently is stop-controlled with "STOP" signs on the east and west Applegate Street approaches.

Potential Solutions: A short-term solution would be to reinstall the STOP signs at this intersection at a higher elevation (seven feet to the bottom of the signs). The hedge on the southwest corner may also be trimmed. This would improve visibility of the signs particularly when there are cars parked on the Applegate Street approaches.

Main Street and 13th Street

This intersection had 11 traffic crashes recorded and is controlled by a traffic signal. The traffic signal has left-turn arrows and separate left-turn phases for left-turning traffic on US Highway 20. The ODOT records showed no reported accidents in 1994, 1995, or 1996. Based on this information, it appears that this intersection may have a better safety record in recent years.

Potential Solution: A short-term improvement would be to install new more visible street name signing.

Main Street and 24th Street

This intersection had 13 traffic crashes recorded and is controlled by a "STOP" sign on 24th Street. This intersection is part of Main Street that has been mentioned as a safety concern area by former Police Chief Richard Raleigh. The traffic safety statistics substantiate the concern for the section from 24th Street to Clemens Mill Road. Traffic volumes are expected to grow on the side streets due to an increase in development.

Potential Solution: The addition of a left-turn lane on Main Street (Highway 20/34) would be an appropriate project to improve safety in this section.

GENERAL PAVEMENT CONDITIONS

The OHP requires that pavements be improved and maintained to fair or better condition. The two state highways in the City of Philomath were rated by the Pavement Services Unit of ODOT in 1997. The Corvallis-Newport Highway (US Highway 20), being part of the National Highway System (NHS), was rated using the NHS Objective Rating procedure, while the Alsea Highway, a non-NHS highway, was rated using the more subjective Good-Fair-Poor (GFP) Rating procedure.

According to ODOT's 1997 *Pavement Condition Report*, the Objective Rating procedure rates highways using index values to represent pavement conditions. These index values are based on distress type, severity, and extent present in the pavement surface. Data on distress are collected frequently along the roadways (roughly every 0.1-mile). For non-interstate highways, data are collected in one direction only, with the assumption that the other direction mirrors the measured pavement condition. Index values range from zero to 100, with larger index values indicating better pavement conditions, and are broken into five descriptive categories: Very Good (99-100), Good (76-98), Fair (46-75), Poor (11-45), and Very Poor (0-10).

The GFP Rating method used for non-NHS highways involves driving highways, conducting visual surveys, and scoring pavement sections with a subjective value. The five rating categories and associated range of values are: Very Good (1.0-1.9), Good (2.0-2.9), Fair (3.0-3.9), Poor (4.0-4.9), and Very Poor (5.0). A brief definition of the GFP pavement condition categories used by ODOT for both asphalt and Portland cement concrete pavements is provided below.

> **Very Good** – Asphalt pavements in this category are stable, display no cracking, patching, or deformation, and provide excellent riding quality. No pavement surfacing improvements are needed.

Concrete pavements in this category provide good ride quality, display original surface texture, and show no signs of faulting (vertical displacement of one slab in relation to another). Jointed reinforced pavements display no mid-slab cracks; continuously reinforced pavements may have tight transverse cracks with no evidence of spalling (or chipping away).

Good – Asphalt pavements in this category are stable and may display minor cracking (generally hairline and hard to detect), minor patching, and possibly some minor deformation. These pavements appear dry or light colored, provide good ride quality, and display rutting less than 1/2 inch deep.

Concrete pavements in this category provide good ride quality. Original surface texture is worn in wheel tracks exposing coarse aggregate. Jointed reinforced pavements may display tight, mid-slab transverse cracks, and continuously reinforced pavements may show evidence of minor spalling. Pavements may have an occasional longitudinal crack but no faulting is evident.

Fair – Asphalt pavements in this category are generally stable, displaying minor areas of structural weakness. Cracking is easier to detect, patching is more evident (although not excessive), and deformation is more pronounced and easily noticed. Ride quality is good to acceptable.

Concrete pavements in this category provide good ride quality. Jointed reinforced pavements may display some spalling at cracks and joint edges with longitudinal cracks appearing at less than 20 percent of the joints. A few areas may require a minor level of repair. Continuously reinforced pavements may show evidence of spalling with longitudinal cracks appearing in the wheel paths on less than 20 percent of the rated section. Shoulder joints may show evidence of deterioration and loss of slab support and faulting may be evident.

Poor – Asphalt pavements in this category are marked by areas of instability, structural deficiency, large crack patterns (alligatoring), heavy and numerous patches, and visible deformation. Ride quality ranges from acceptable to poor.

Concrete pavements in this category may continue to provide acceptable ride quality. Both jointed and continually reinforced pavements display cracking patterns with longitudinal cracks connecting joints and transverse cracks occurring more frequently. Occasional punchout (or pothole) repair is evident. Some joints and cracks show loss of base support.

Very Poor – Asphalt pavements in this category are in extremely deteriorated condition marked by numerous areas of instability and structural deficiency. Ride quality is unacceptable.

Concrete pavements in this category display a rate of deterioration that is rapidly accelerating.

State Highways

According to the 1997 ODOT *Pavement Condition Report*, the section of US Highway 20 (Main Street) within the Philomath urban area between the western city limits and Newton Creek Bridge (MP 50.11 to MP 51.31) is in poor condition. The section of US Highway 20 (Main Street) from the Newton Creek Bridge to the eastern city limits (MP 51.31 to MP 52.09) is in fair condition. The Alsea Highway from Grange Hall Road to US Highway 20 (MP 58.03 to MP 58.56) is in fair condition.

Collectors

The ODOT Pavements Unit published a 1994 report entitled, *Pavement Rating Workshop, Non-National Highway System.* This report thoroughly defines the characteristics that pavements must display to be categorized under the GFP system. The report also provides color photographs of roadways that display these characteristics, which aids in field investigation and pavement condition rating. These established guidelines were used in conducting a subjective evaluation of pavement condition for all collector streets within Philomath during January 1998.
Nearly all of Philomath's collector streets were found to be in fair or better pavement condition. Approximately 24 percent of the roughly seven miles of collectors were in good condition, another 74 percent were in fair condition, and the remaining two percent were in poor condition. The worst pavement condition was found along Mt. Union Avenue, which was in poor condition.

Other Roadways

Other roadways of local interest were rated in Philomath using the subjective GFP rating system, including Applegate Street, College Street, Grange Hall Road, and Fern Road, representing nearly three and one half miles of roadway. Of these roadways, roughly 12 percent were found to be in good condition, another 29 percent were in fair condition, and the remaining 59 percent were found to be in poor pavement condition. College Street and Grange Hall Road accounted for all of the poor condition pavement.

BRIDGES

The Oregon Department of Transportation maintains an up-to-date inventory and appraisal of Oregon bridges. Part of this inventory involves the evaluation of three mutually exclusive elements of bridges. One element identifies which bridges are structurally deficient. This is determined based on the condition rating for the deck, superstructure, substructure, or culvert and retaining walls. It may also be based on the appraisal rating of the structural condition or waterway adequacy. Another element identifies which bridges are functionally obsolete. This element is determined based on the appraisal rating for the deck geometry, underclearances, approach roadway alignment, structural condition, or waterway adequacy. The third element summarizes the sufficiency ratings for all bridges. The sufficiency rating is a complex formula that takes into account four separate factors to obtain a numeric value rating the ability of a bridge to service demand. The scale ranges from zero to 100 with higher ratings indicating optimal conditions and lower ratings indicating insufficiency. Bridges with ratings under 55 may be nearing a structurally deficient condition.

ODOT maintains bridge inventory data for one bridge within the City of Philomath. It is located along Highway 20/34 (Corvallis-Newport Highway) crossing over Newton Creek and is state-owned and maintained. The ODOT bridge inventory information indicates that this bridge (ODOT Bridge No. 01186) is functionally obsolete; however, no bridge improvements are scheduled under ODOT's 1998-2001 Statewide Transportation Improvement Program (STIP). The only other bridge in Philomath is the pedestrian bridge across Newton Creek at Applegate Street, which is in good condition.

BICYCLE FACILITIES

The *Oregon Bicycle and Pedestrian Plan* (OBPP) recognizes four bicycle design treatments: multi-use paths, bike lanes, shoulder bikeways, and shared roadways. Philomath's existing bicycle network, although limited, incorporates all four types of bicycle facilities. These existing bike facilities are shown in Figure 3-2. A description from the OBPP of each of the four types of bicycle facilities is necessary:

- A multi-use path is a path physically separated from motor vehicle traffic used by bicyclists, pedestrians, joggers, skaters, and other non-motorized travelers.
- A bike lane is officially designated through signing and striping to create an exclusive or preferential travel lane for bicyclists.
- A shoulder bikeway accommodates bicyclists on a hard shoulder of the road and is typically at least four feet wide (six feet or more preferred). This provides better and safer separation of cyclists from motorists.
- A shared roadway facility is one where motorists and cyclists occupy the same roadway; it typically includes roadways without bike lanes or shoulder accommodations. This can be a problem on roads with heavy traffic, high speeds (generally >25 mph), or hills.

It should also be noted that four bicycle facilities connect Philomath and Corvallis. They are as follows:

- Country Club Road (Corvallis) to US Highway 20 to Philomath (multi-use path);
- North 53rd Street to Reservoir Road to West Hills Road to 19th Street, ending at College Street (bicycle lanes);
- US Highway 20 from Corvallis to 19th Street in Philomath (shoulder bikeway); and
- Plymouth Road from 53rd Street to Bellfountain Road, south along Bellfountain beyond Chapel Road (shoulder bikeway).

PEDESTRIAN FACILITIES

The City of Philomath lacks sidewalk connectivity along one or both sides of many roadways maintained by the city, county, and state. As a result, pedestrians must frequently share the road with cars. Many sidewalk segments also lack curb cuts for wheelchair access. The city has developed, and is in the second year of implementing, a comprehensive ten-year sidewalk development plan to address these deficiencies along roadways under its jurisdiction. Under the plan, all city streets with curb and gutter will be retrofitted with sidewalks.

A pedestrian bridge along Applegate Street at 23rd Street provides a direct connection between neighborhoods currently bisected by Newton Creek. The bridge provides access for residents in the developing southeastern quadrant of town to community resources, including City Park and Philomath's schools. A multi-use path connects Philomath residents with community resources in Corvallis, such as Avery Park. The existing western terminus of the path in Philomath is located along Applegate Street just west of 27th Street.

TRANSIT SERVICE

Intercity transit service in Philomath is provided by the Valley Retriever, which makes three round trips per day between Newport, Philomath, Corvallis, and Albany. Greyhound bus service is available in Corvallis and Albany. There is no regularly scheduled service for local trips in the Corvallis/Philomath area. Dial-A-Bus service is available, in addition to several other on demand transportation services for the disadvantaged in Benton County.

RAIL SERVICE

The freight rail service in Philomath is provided by the Willamette & Pacific Railroad, which is a private provider. The rail infrastructure (tracks) is shown on Figure 3-1 as the Southern Pacific Company Railroad (prior operation). Currently, there is no regularly scheduled passenger rail service to and from Philomath.

As a grade-crossing safety measure, three crossings have recently been closed (8th, 10th, and 12th streets). Street improvements and signalization will result in more traffic crossing the railroad at 7th, 9th and 13th streets. There is only one crossing on Highway 20/34, at the railroad spur to the Georgia Pacific mill.

AIR SERVICE

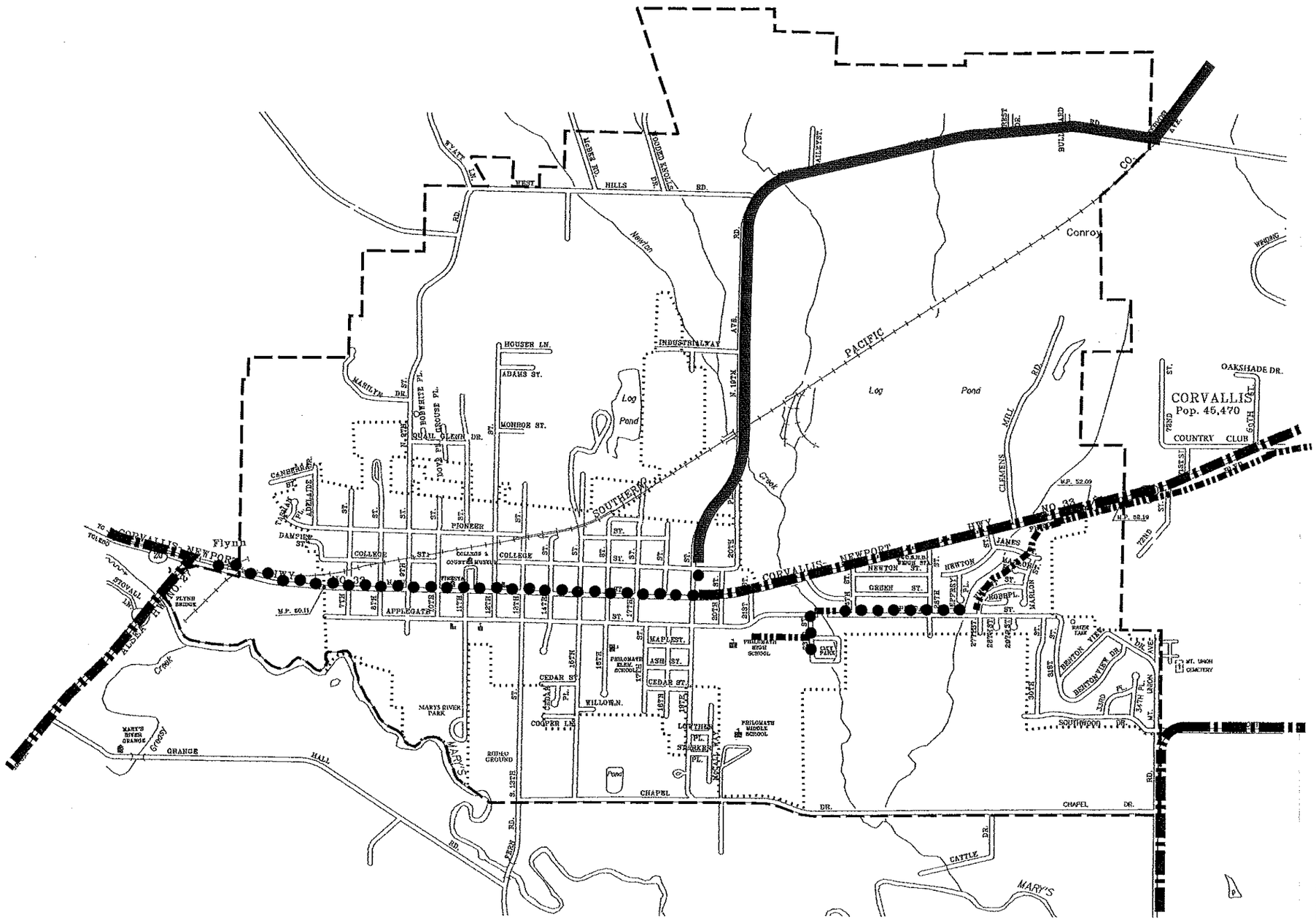
Daily commercial air service is provided by Harbor Air at the Corvallis Municipal Airport, which is outside the Philomath UGB area. The nearest large-scale commercial air service is at Eugene. The Corvallis Municipal Airport is located approximately five miles southeast of Philomath. According to the "1997 Transportation Volume Tables" by ODOT, the Corvallis Municipal Airport has an estimated 83,000 operations (takeoffs and landings) per year.

WATERBORNE TRANSPORTATION

There is no water transportation in the City of Philomath.

PIPELINES

There are no major transportation pipelines in the City of Philomath.



(NOT TO SCALE)

LEGEND:

- URBAN GROWTH BOUNDARY
- CITY LIMITS
- BIKE LANE *STRIPED AND SIGNED*
- SHOULDER BIKEWAY
- SHARED ROADWAY
- MULTI-USE PATH

FIGURE 3-2

Existing Bicycle Facilities

ODOT0254/FIG3-2.DGN/TNT/08-20-98