McMinnville Corridor Refinement Plan

Oregon Highway 18 Corridor Refinement Study
McMinnville Section

DRAFT

2/16/96

A cooperative effort of the City of McMinnville, Yamhill County, the Oregon Department of Transportation, and the Mid-Willamette Valley Council of Governments

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Oregon Highway 18
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The McMinnville Corridor Refinement Plan was guided by a steering committee made up of elected officials and staff members from affected jurisdictions. The steering committee provided the study with a valuable forum in which to consider the issues, develop coordinated strategies, and make prudent judgments to solve the transportation challenges faced on this portion of the Highway 18 corridor. In formulating the solutions, the steering committee considered recommendations from the public and technical advisors. The steering committee's work has resulted in a workable system for the future.

Steering Committee

Councilor Robert Payne	City of McMinnville
Commissioner Dennis Goecks	Yamhill County
John deTar	Oregon Department of Transportation, Region 2
Richard Highsmith	City of McMinnville
Bill Gille	Yamhill County

The inclusion of proposed projects and actions in this plan does not obligate or imply obligation of funds by any jurisdiction for project level planning or construction.

However, the inclusion of proposed projects and actions does serve as an opportunity for the projects to be included, if appropriate, in documents such as the State Transportation Improvement Program (STIP). Such inclusion is not automatic. It is incumbent on the state, county, city, and general public to take action to encourage and support inclusion into the STIP at the appropriate time.

Projects included in the STIP are required to have funds available so the number of projects which can be included are constrained by funding levels.

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Executive Summary

This Oregon Highway 18 Corridor Refinement Plan was developed in response to state, city, and county desires to provide good transportation services along a 3.8 mile (6.1 kilometers) section of Highway 18 near McMinnville. The section begins where the highway crosses the South Yamhill River and terminates at approximately one-half mile (0.8 kilometers) west of the highway's junction with the Lafayette Highway (Highway 233). It includes the area locally known as Three Mile Lane.

The concern for continuing good transportation services arose because of increased residential, commercial, and industrial development and the potential for continuing development as Yamhill County and particularly the City of McMinnville continue to grow in population and employment over the next twenty years. Additionally, growth at other points on the corridor will also increase the demand on transportation services.

During the plan's development, elected officials and staff members from all the jurisdictions involved worked closely to gain public input, analyze the impacts and likelihood of future growth, and to develop solutions for the transportation problems expected to occur.

The solution which best satisfies the concerns and solves the developing problems is construction of:

- Collector-access roads along this section of the corridor.
- An interchange to allow access to the highway from collector-access roads and north-south arterial traffic.
- A full service interchange to replace the existing East McMinnville Interchange at the Highway 18 Spur.

The collector-access road solution may be phased in over the twenty-year period of the plan. It can be implemented in stages which coincide with development. If development is delayed due to international, national, or statewide changes in economic conditions, these stages can also be delayed. The solution also meets the environmental, social, transportation, and other needs of the majority of users.

In 1995 costs, construction of the collector-access road solution is roughly estimated to be $20,500,000 and use approximately 92 acres at an additional cost of $4,100,000. A more precise estimate of the cost and acreage involved will require project level planning.

The plan is consistent with provisions of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and the Oregon Transportation Planning Rule (TPR). ISTEA requires each state to have a statewide planning process of which this plan is a part. This plan and its process also meets the TPR

requirements, among others, for coordination of transportation plans among the jurisdictions involved and adoption by each into their transportation and/or land use plans.

Introduction

Background Information

This document is one in a series of transportation plans commissioned by the Oregon Department of Transportation (ODOT) for the purpose of studying major highways within the state. This portion of the McMinnville section of Highway 18 was chosen for one of the earliest studies because of the potential for rapid development within the city and along this part of the Highway 18 travel corridor. Other actions being conducted concurrently or subsequently—specifically the Newberg/Dundee Bypass Environmental Impact Statement and the Highway 18/99W Corridor Strategies Plan—will address other parts of the corridor. Additionally, new studies may be commissioned to conduct detailed planning at other corridor locations. These planning activities are required by the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and Oregon's Transportation Planning Rule (TPR).

Key steps in the process include analysis of: (1) the existing highway and intersecting roads/streets; (2) the potential effects of the future uses of bordering lands and other factors which may increase traffic; (3) city, county, and state plans affecting the area; and (4) solutions to expected problems through the year 2016.

Due to the recent completion of McMinnville's Transportation Master Plan and expected development along the eastern McMinnville segment of Highway 18, ODOT decided the area would benefit from a corridor planning "jump start." In spring of 1994, ODOT began developing the framework, process, and policies for a study of the eastern McMinnville segment.

Planning Framework, Process, and Policies

There are three different types of corridor planning. One type is ***general planning*** for an entire corridor. General planning identifies the priority and timing for basic transportation improvements; for example, a passing lane by the year 2000. The general plan is usually all that is necessary for small cities and rural areas.

Larger cities normally require a different level of effort, known as ***system planning***. The system plan contains a greater amount of detail. It may suggest widening of a local street feeding into a state road, addition of turn lanes, or rerouting other city streets that have an impact on the corridor.

For most corridors, the system plan and the general plan will meet all the requirements. In some cases, however, a third corridor plan, called the ***refinement plan***, is necessary. The

refinement plan is normally an outgrowth of general and/or system plans. It is the most detailed of all the corridor plans. A typical refinement plan might recommend widening an inner city street and routing traffic to a second city street which then becomes a one-way street leading to a cloverleaf intersection. Often, the plan will also call for land use restrictions along the corridor or streets affecting the corridor.

This plan is a combination of all three types of corridor planning. Currently, there is no corridor plan for Highway 18/99W, so this plan must consider certain general aspects of the larger corridor. Additionally, the plan will consider factors common to a system plan, such as the effects of McMinnville streets connecting to the corridor. And lastly, it must consider issues pertinent to a refinement study, such as land use and development.

The planning process began when ODOT developed a list of the elements to be studied and determined how the work would be accomplished. This statement of work (Appendix C) contains ten broad tasks. These tasks are to:

- identify precise planning area;
- establish goals and objectives;
- involve the public in the planning process;
- determine constraints on future highway improvements;
- review existing plans, policies, and standards;
- inventory existing transportation systems and facilities;
- determine transportation needs;
- convert the city's computerized transportation model (T Model 2) to the new state standard (EMME/2);
- conduct refinement planning for future land uses; and
- develop an implementation plan.

The work will supplement the City of McMinnville's Transportation Master Plan with data applicable to the corridor plan. Additionally, the converted transportation model will be used to forecast information for corridor planning.

The Mid-Willamette Valley Council of Governments (MWVCOG), an agency whose membership includes all the jurisdictions within the study area, was selected to perform the work. In late August 1994, the MWVCOG began the study. By December 1994, it was determined that the data contained in the City of McMinnville's T Model 2 lacked certain background information necessary for a quick and easy conversion to EMME/2. After determining a new schedule for completing the model, the plan's completion date was extended to December 29, 1995. In October 1995, the completion date was extended to May 31, 1996. The purpose of this was to comply with the steering committee's desires to investigate a new modification of the corridor solution.

The plan was completed under the policy supervision of ODOT's Region II Senior Planner and with the guidance of a steering committee comprised of Yamhill County and City of McMinnville elected officials, as well as staff members from ODOT's Region II and District 3, Yamhill County, City of McMinnville, and MWVCOG. A consulting team from CH2M Hill and Kittelson and Associates, Inc. provided information to the steering committee as needed. Input from four public workshops was used to develop and test various aspects of the plan.

Goals, Objectives, Strategies, and Issues

Many of the goals, objectives, strategies, and issues were suggested by the study's scope of work and adopted by the steering committee. In addition, the public contributed site specific issues throughout the study period. One adopted goal of the study was to ensure that the corridor continues to meet level of service (LOS) C. This LOS is the standard set by the Oregon Transportation and Highway Plans for all Highways of Statewide Significance, the second highest classification within the state's Level of Importance (LOI) system. Meeting this goal complies with the highway's management objective of *providing safe and efficient high-speed continuous-flow operation in rural areas, and high to moderate speed operations with limited interruption of flow in urban and urbanizing areas*. It also allows the highway to retain its primary function of providing connections and links to large urban areas, ports, and major recreation areas that are not directly served by interstate highways.

To attain this goal and objective, the steering committee determined that application of a Category Two Access Management Standard was also a necessary goal. This standard implements full access control (expressway conditions) applicable to this corridor's LOI. Generally, the requirements of this access standard do not allow direct land access and the corridor is distinguished by highly controlled connections and medians. Traffic signals should be avoided and grade separations should be considered for high volume cross streets. No private drives should have direct access to the highway, and intersections are spaced one-half to two miles (0.8 to 3.2 kilometers) apart in urban sections and one to five miles (1.6 to 8.0 kilometers) apart in rural sections.

To apply a Category Two Access Standard to this section of Highway 18, the following steps must be accomplished:

- identify the general location(s) for a future separated grade interchange;
- identify a future road network which can provide property access to the highway, including a beltline from the corridor, around the built-up area of McMinnville, to Highway 99W;
- identify road connections between any interchanges;
- develop a plan to allow a transition to the new access standard; and
- provide facilities to deal with multimodal capabilities if they are necessary.

To accomplish these activities, the state, regional, and local needs were reviewed. Primary among local needs was meeting a goal of providing a land access function. Meeting this goal was a major study objective. Other local needs were identified as: road connections for airport operations, a proposed beltline, connections for intermodal operations, and accommodating new development such as the Air Venture Museum and the relocated hospital.

State and regional needs included maintaining the ability for citizens using the Highway 18/99W corridor to safely and rapidly travel through Yamhill County. Construction of gaming centers near Grand Ronde and Lincoln City and major housing developments near Lincoln City are factors to consider when studying the statewide need.

The system refinement planning requirements needed to support these actions include:

- identify the types of facilities (intercity bus and the arterial, collector, and local roads) that are necessary to support development;
- identify and evaluate alternative locations for a future interchange, considering land use and environmental impacts;
- identify funding sources and the cost to the public;
- evaluate alterations to the East McMinnville interchange;
- identify road connections between existing and future interchanges;
- determine alternative locations for roads serving a land use function;
- identify demand management and system management opportunities; and
- evaluate system benefits and costs, including impacts on vehicle miles, safety, and level of service

The study process included a review of all documents pertaining to this section of road. See Appendix B for a list of the documents.

Relevant Regulations

There were two significant actions—one federal and one state—which occurred within a relatively short time span to prompt a major transportation planning effort within Oregon. The federal action, ISTEA, provided transportation funding for six years. Furthermore, ISTEA requires each state have a statewide planning process and develop a transportation plan and program. Additionally, each state is required to develop, establish, and implement management systems to address safety, congestion, public and intermodal transportation. Oregon implemented many of these federal provisions by adopting the Oregon Transportation Plan (OTP) on September 15, 1992. An element of the OTP is the Oregon Highway Plan, which requires development of corridor plans for various state highways.

Oregon Administrative Rule (OAR) 660, Division 12 was adopted in April 1991. Commonly known as the Transportation Planning Rule (TPR), it implements Statewide Planning Goal 12 (Transportation) by mandating that state agencies and local governments show compliance with other state goals, especially where work on rural lands is concerned. It also requires coordination of all aspects of transportation plans and prescribes certain predetermined outcomes such as reduction of automobile use.

Although the TPR is wholly applicable to this plan, certain aspects were found to play a more significant role in developing the plan and its conclusions. For example, Section 660-12-030(3)(a) requires that the determination of local and regional transportation needs shall be based on 20-year "population and employment forecasts . . ." and "to encourage urban development on urban lands prior to development on urbanizing land" (Goal 14).

Section 660-12-035 contains requirements for evaluating and selecting transportation alternatives including: improvements to existing facilities, new facilities, system and demand management measures, and the no-build system alternative required by the National Environmental Policy Act of 1969. Additional requirements support urban and rural development by providing facilities and services to support the land uses shown in the comprehensive plan. Furthermore, the system must consider issues such as air, water, energy, etc. The TPR also requires five-year interim benchmarks to evaluate the plan's progress.

Although the city's Transportation Master Plan discusses placement of a north-south arterial connecting Highway 18 to Highway 99W, construction of such an arterial is not likely to be accomplished within the near term period indicated in the Master Plan. The funds for the facility will be difficult to obtain and higher priority needs will take precedence.

Should construction of such an extension become likely, it will be influenced by provisions of OAR 660-12-065, *Transportation Improvements on Rural Lands*. This section identifies the transportation work consistent with Goal 3 (Agricultural Lands), Goal 4 (Forest Lands), Goal 11 (Public Facilities and Service), and Goal 14 (Urbanization). As the TPR is written and in view of the work planned, the north-south arterial will require a goal exception. If, over the years, the area becomes included in the UGB, a goal exception will not be necessary.

Transportation Inventory/Conditions

This section describes the existing conditions of the transportation facilities.

Roads/Streets

Study Area

The study section of Highway 18 is between milepoint 45.6 (bridge over the South Yamhill River) to milepoint 49.4 [one-half mile (0.8 kilometers) west of the Highway 18/233 intersection]. It is designated a principal arterial (city designation: major arterial) serving as a southerly route around the eastern edge of McMinnville. Furthermore, it is a National System Highway, a Highway of Statewide Significance, and an Access Oregon Highway. At milepoint 45.6, the road has two 11-foot (3.4 meters) travel lanes and paved shoulders that vary from 2.5 feet (0.8 meters) [4 feet (1.2 meters) including curb] crossing the bridge to up to 10 feet (3.0 meters) in spots. Proceeding east, the road continues with these dimensions for approximately seven-tenths of a mile (1.1 kilometers). From that point the highway changes to five lanes, including a center lane for left turning traffic. This portion of the highway has four 12-foot (3.6 meters) travel lanes, a 14-foot (4.3 meters) turning lane, and 8-foot (2.4 meters) paved shoulders. The five-lane section continues for 2.3 miles (3.7 kilometers) to milepoint 48.6 (the intersection with Cruickshank Road). It then tapers back to a two-lane road just prior to the drainage crossing near milepoint 49.0.

Traffic Volumes

The Oregon 1993 Traffic Volume Tables show the average daily traffic (ADT) count ranging from 7,800 ADT west of the East McMinnville Interchange up to 12,000 ADT just east of the interchange. The remainder of the road is in the 8,000 ADT range. Traffic along the corridor increased by 71% (an average of 3.6% per year) from 1970 to 1990. From 1990 to 1993, a period which saw the highway upgrade from a two to five lane facility, the growth was 19.1% (an average of 6.4% per year). The increase in ADT is consistent with increases in population and employment along the corridor. The 1984 Environmental Impact Statement (EIS) East McMinnville Interchange-Airport Road Salmon River Highway Yamhill County Oregon found that the five-lane improvement is designed to handle a 16,650 ADT and still operate at level of service B (i.e., at signalized intersections, the average stop delay ranges from 5.1 to 15.0 seconds per vehicle). The EIS estimated this level would be reached by 2000. Data in the recent McMinnville Community Hospital traffic impact analysis indicates the level will be reached a year and a half earlier. Figure 1 shows the ADTs at various locations along the study area.

Accident History

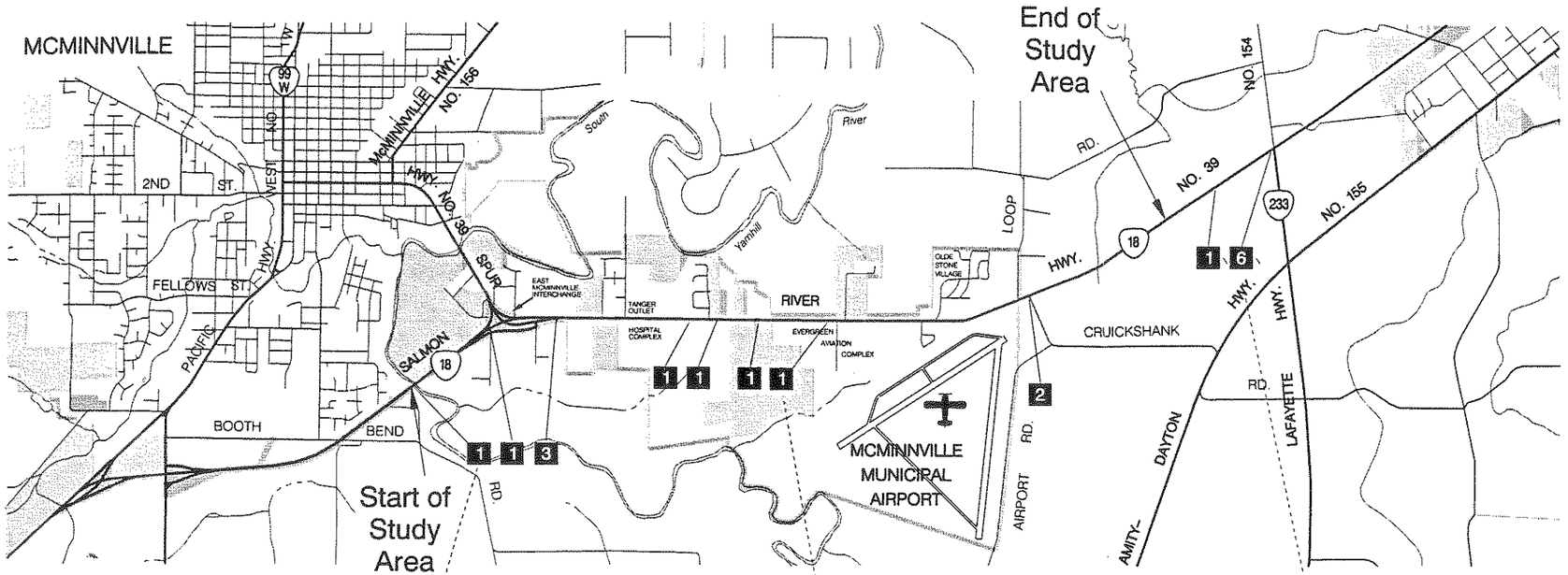
The three year accident history along the study area is fairly low. The 1994 Safety Priority Index System (SPIS) does not place any site on the corridor in the state's top ten percent. Accidents vary from a single accident at seven locations to a high of three accidents near milepoint 46.4, just east of the East McMinnville Interchange. Outside the study area, at the intersection of Highways 18 and 233, six accidents occurred. One fatality occurred near the Cruickshank Road intersection. From January 1991 through December 1993, a total of 11 accidents occurred within the study area. An additional 18 accidents were recorded for Highway 18 Spur. Figure 1 also shows accident locations.

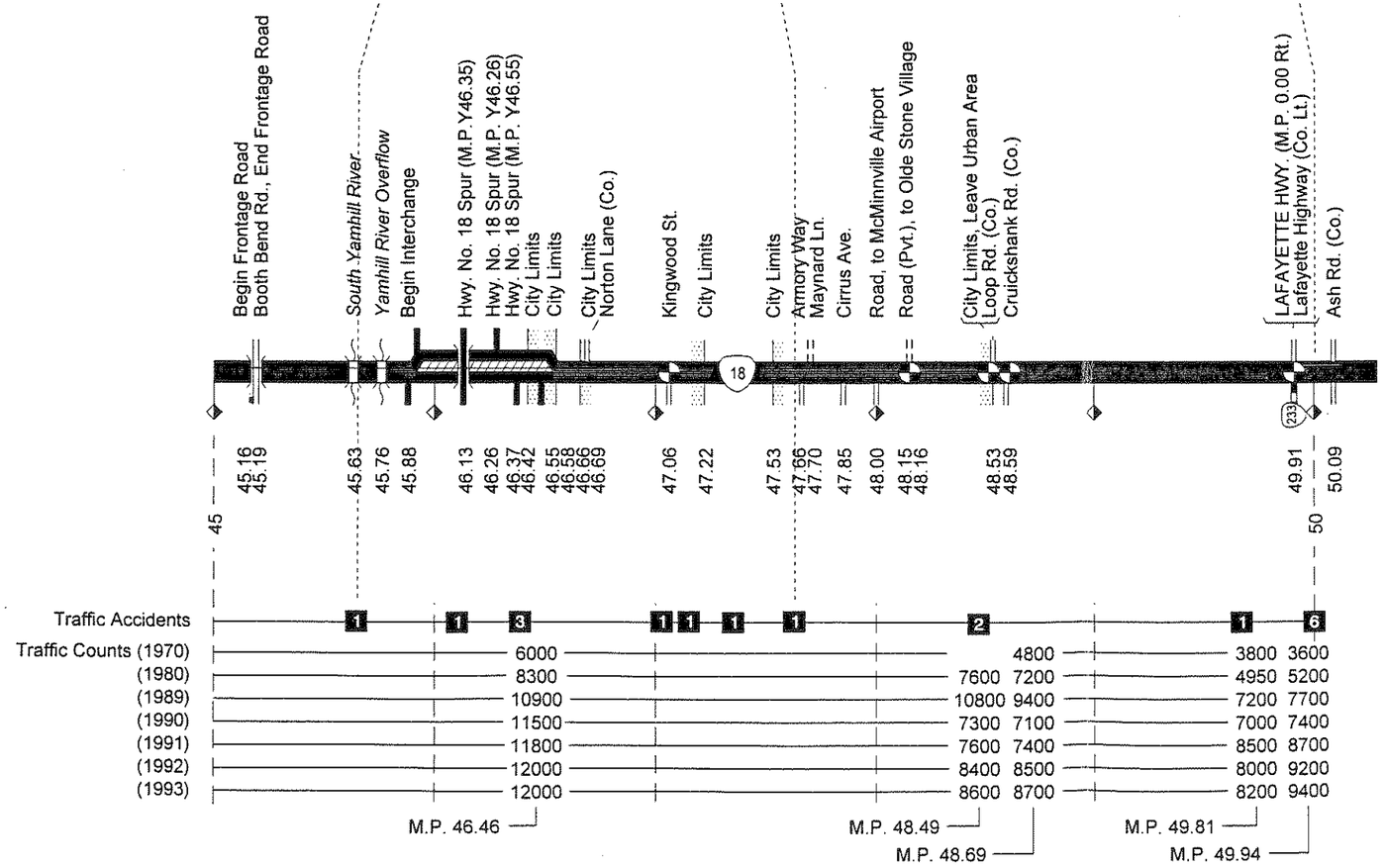
Adjoining Accesses

There are thirteen publicly owned roads directly affecting the corridor. Six connect directly to the highway and, from west to east, they are: Highway 18 Spur, Norton Lane, Kingwood Street, Armory Way, Cirrus Avenue, Loop Road, and Cruickshank Road. Two are frontage roads, one to the north and one to the south of Highway 18. Four others connect to the north and south frontage roads east of the interchange. They are: Lawson Lane, Pacific Street, Atlantic Street, and Dunn Place.

The Highway 18 Spur is a major collector with a traffic count in the 8000 ADT range. The road's southern end directly connects to the East McMinnville interchange and merges with Third Street on the north end. The North Frontage Road connects to the Spur just north of the East McMinnville Interchange, and terminates at Norton Lane. Local residents report difficulty in making left turns from the Spur onto North Frontage Road.

Norton Lane, slightly over a half mile (.80 kilometers) east of the interchange, is classified as a local access road by the county. (Although a county road, a portion is managed by the city). The east side of the road is bordered by the Tanger Factory Outlet shopping center and farm lands, while the west side is bordered by McDonalds restaurant, a residential area, and farm lands. The corridor's northern frontage road terminates at Norton Lane. Since the recent buildup in the area, the paved portion of Norton serves as a major collector for Highway 18. The city's Transportation Master Plan proposes extending Norton northward to connect with Lafayette Avenue or Highway 99W, and reclassifying Norton as a minor arterial road. Two thousand feet (610 meters) to the east is Kingwood Street, a city local residential street. No traffic counts are taken for city streets. The last road directly connecting on the north side is Loop Road (County Road #92/192), classified as a local road. This county road, with an ADT of 109, provides access to adjacent land and to higher classified roads. On the south side of the study area, the road furthest east is Cruickshank Road (County Road #32). Cruickshank is classified as a major collector and has an ADT of 4018. West of Cruickshank, Cirrus Avenue serves as the entrance to the airfield complex. It is a city-owned local street. Approximately 0.4 miles (0.6 kilometers) west of Cirrus Avenue is Armory Way which serves as an access for the Evergreen Corporation





TRANSPORTATION DATA SECTION
DIRECTORY & MAPPING

SCALE

City Limits
Urban Growth Bndy

Highway 18 McMinnville

THREE MILE LANE CORRIDOR

1970-93 Traffic Counts

5800

(Average Daily Traffic)

1991-93 Accident Locations

1

(Number of Accidents)

Figure 1

complex, the Army National Guard Armory and a city park. Armory Way is not classified but serves as a local street. Continuing west, the next direct access road is the new south extension of Norton Lane. This extension serves the newly constructed hospital and is the end point for the two-lane southern frontage road. The Norton Lane intersection with Highway 18 is signalized.

The four publicly owned roads connecting to the north and south frontage roads are Lawson Lane to the south and Pacific Street, Atlantic Street, and Dunn Place to the north. These are city local residential streets. The Pacific Street connection offers a very short access directly onto the Highway 18 Spur. Lawson Lane provides service to scattered residences. Residents using the western part of the southern frontage road have expressed displeasure with the inconvenience of driving a half mile (0.8 kilometers) east along the frontage road to Norton Lane in order to travel to McMinnville's central business district.

In addition, there are 19 more access roads from farm fields, residences, and businesses onto the corridor.

The following locations have permits on file with ODOT, District 3[1]:

- Milepoint 46.69 City of McMinnville/Bend-O-River (Norton Lane)
- Milepoint 46.93 Don Sullivan
- Milepoint 47.02 Fredricks Motor Company
- Milepoint 47.10 River Park Subdivision (Kingwood Street)
- Milepoint 47.70 City of McMinnville (Armory Way)
- Milepoint 47.88-.90 Evergreen Helicopter
- Milepoint 48.02 City of McMinnville (Cirrus Avenue)
- Milepoint 48.14 Heather Drive (Old Stone Village)
- Milepoint 48.19 City of McMinnville

There are four additional private or business direct accesses onto the north frontage road, and two (including Martin Lane) on the south. One of these serves the mobile home park.

From an assessment of the numbers, types, and spacing of the public and private accesses, it can be concluded that the corridor functions between access category 4 and category 5. These categories related closely to a level of importance more pertinent to regional and district highways than the level of importance actually applicable to this corridor.

Bridges

There are two significant structures, both crossing the South Yamhill River at the beginning of the study area. These are bridge number 08490 and 08492 located near milepoints 45.6 and 45.8. Both were built in 1963. A

[1]The milepoint locations above may not correlate perfectly with milepoints on the current road. Most permits are 20 to 30 years old and were granted prior to construction of the new five-lane section.

review of the 1994 inspection reports shows the structures are in good condition with minor safety problems (e.g., inadequate guardrail). The bridges are in the upper 25% of the state's list of facilities requiring earthquake retrofit protection. There is no special maintenance planned or upgrades scheduled. The bridges can be expected to remain structurally serviceable for a minimum of 20 years. The bridge's 30-foot (9.1 meters) road width prevents restriping it to a four-lane section so it will be a traffic bottleneck should this section of the corridor be widened.

Bikeway/Pedestrian

Highway 18 is designated as a bike route in accordance with requirements specified for arterials by the Transportation Planning Rule, the Oregon Transportation Plan, and the Oregon Bicycle and Pedestrian Plan (draft, December 1994). The "shoulder bikeway" concept is used and the road is not signed, in accordance with guidelines. The portion of the shoulder bikeway crossing the bridges is inadequate for shared use. This requires bicyclists to use the travel lane for the crossing.

A sidewalk between the highway and Tanger Factory Outlet shopping center and a crosswalk on three legs of the Norton Lane intersection are the only pedestrian amenities directly on the highway. For the remainder of the route, pedestrians use the road's shoulder. However, the north and south frontage roads have one sidewalk each which provide pedestrian service west of Norton Lane.

Public Transportation

There are limited sources of public transportation available to residents, employers, and employees along Highway 18. One taxicab company and one on-call company requiring 24-hour notice can provide service to and from the area. No public transportation services [Greyhound or Yamhill County (YAMCO) Transportation] make scheduled runs along the corridor. The provider for government sponsored public transportation is YAMCO, a division of the Yamhill Community Action Program (YCAP). YAMCO is open to all the public and provides on-call services and regularly scheduled morning trips to Lafayette, Dundee, Newberg, and Sherwood as part of the LINK bus schedule. YAMCO also travels to Yamhill, Carlton, Willamina, and Sheridan. No regularly scheduled route is operational along the corridor, but the use of the on-call service to the corridor is expected to increase because of the hospital relocation.

Air/Rail/Pipeline

The only other mode of transportation directly affecting the corridor is air. The McMinnville Airport is located adjacent to the highway near the east end of the study area. It is an excellent facility with two 150-foot (45.7 meters) wide runways. One is a mile (1.6 kilometers) long and the other 4,750 feet (1,448 meters). The primary runway is equipped for instrument and night flying. Although physically capable of supporting a commuter airline, the field's close proximity to Portland makes it unlikely that a scheduled airline will operate from this location for 20 or more years. Presently, it is more feasible to drive to Portland International and fly direct for long distance flights. Shorter distances are more practical by automobile. Charter flights are available for emergencies and short haul travel. Any expanded use of the airfield, such as for commuter type airlines, would increase automobile traffic along the corridor.

An existing rail system travels from south of McMinnville, through its center, and then parallels Highway 99W. It does not carry passengers and requires some upgrading to improve goods hauling. A plan to improve it to a 25 mph (42 kph) track is presently being considered. It is not expected to have any impact on the corridor's study area for the time frame of this study.

Traffic Forecasts

Modeling

The study used the Equilibre Multimodal, Multimodal Equilibrium (EMME/2) travel demand forecasting model. This program is a state-of-the-art transportation planning tool, and is the standard for ODOT and many other transportation planning agencies. Development of the model for the McMinnville study relied on existing demographic, street location, trip generation, land use, and trip distribution data. The model was converted from the T Model 2 software which used 1991 data from the McMinnville Transportation Master Plan. In order to better estimate travel demand on streets and test transportation/land use alternatives, the conversion also included adding three traffic analysis zones and three external stations. These zones were established using criteria of current and future homogeneous land use, conformance with boundaries, and the street system. One land use alternative used growth within the current UGB and a second used growth in an expanded UGB. The EMME/2 model estimated only vehicle trips and did not include trips made by other modes—bicycle, pedestrian, or bus—because of the additional modeling costs coupled with the likelihood that the results would be insignificant.

Anticipated External Influences

One significant activity that will affect Highway 18 is the Spirit Mountain gaming facility near Valley Junction which was opened in October 1995 by The Confederated Tribes of Grand Ronde. The facility will include a gaming center, 150-unit recreational vehicle park, 200-unit motel, 18-hole golf course, and specialty retail shops. Construction will be in two phases with phase one consisting of the gaming center and RV park completed in 1995 and phase two completed in 2000. Based on information provided by the Confederated Tribes, Highway 18's traffic count is expected to increase by 5,700 ADT (500 ADT during evening peak hours) when both phases are completed. Phase one is expected to generate an increase of 2,600 ADT (230 ADT during evening peak hours). Sixty percent of the new traffic is expected to be from the Portland area. The projected traffic increase was included in the model.

Another gaming center, the Chinook Winds Gaming and Convention Center, is being constructed near Lincoln City by the Confederated Tribes of the Siletz Indians. It is expected to generate some additional traffic along the Highway 18. A temporary facility was opened in Spring 1995 and the permanent facility will open in May 1996. The amount of

traffic generated by this facility is included in the "background" of the model.

Existing and Future Land Uses

The land adjacent to Highway 18 is currently mixed use, with agricultural predominating. There are some farm homes along the highway, although four subdivisions and two mobile home parks represent the majority of residential homes. The Quail Ridge subdivision was completed in 1995 and borders the Highway 18 Spur. It consists of six homes and is flanked by a larger number of homes built in the 1960s and 1970s. Proceeding east on the highway's north side, there is an older residential area near milepoint 46.1, with homes from the 1940s and 1950s. North of the road near milepoint 46.7 (Norton Lane vicinity) is the Bend-O-River subdivision. In the last few years 35 homes were completed in this subdivision. Construction should be completed on all 76 lots before 2016. Approximately one-half mile east of Norton Lane is the Kingwood subdivision. This 1976 subdivision has 51 single-family homes and 31 duplexes. Slightly east of this subdivision, the Sun Retirement Corporation plans to build a 50-unit assisted living facility for the elderly. Olde Stone Village, north of the airport, was established in 1975 and has 163 mobile and manufactured homes. There is a potential for the Village to expand west into a 10.7 acre parcel. On the south side of the highway, near milepoint 46.5, is Evergreen Park (formerly Wheel Estates Mobile Home Park) with 97 mobile homes. *This increase in residences along the route is projected to continue.*

There are a few commercial, industrial, and public service uses along the highway. These range from the recently opened McDonalds restaurant and Tanger Factory Outlet shopping center to the long-time resident Evergreen International Aviation. The McMinnville Community Hospital is constructing a new hospital near the southern portion of Norton Lane. Phase one of this project will be completed in 1996. The Municipal Airport, Airport Park, and the Armory are the other public uses. Figure 2 shows the existing comprehensive plan designations and Figure 3 shows existing zoning.

Because of its steady growth in the last few years, McMinnville needs additional commercial land. The Tanger Factory Outlet shopping center plans to expand its facility and there has been an increase in interest for establishing other commercial enterprises along the corridor. For the last three years there have been plans to build a large aircraft museum, featuring the Spruce Goose, near the airfield.

The steering committee selected two future 2016 land use alternatives for traffic forecasting. The first alternative, the 2016 Base Case, is shown in Figure 4. The base case assumes growth remains within the present urban growth boundary and follows the city's comprehensive plan. The second alternative, the 2016 Expanded UGB Case (see Figure 5), represents an extension of the urban growth boundary to the flood plain line to the south and includes Evergreen International Aviation lands to the north. The Expanded UGB Case increases the land within the UGB by roughly 550 acres. In this alternative, the UGB meets the city's expected need for more developable commercial land.

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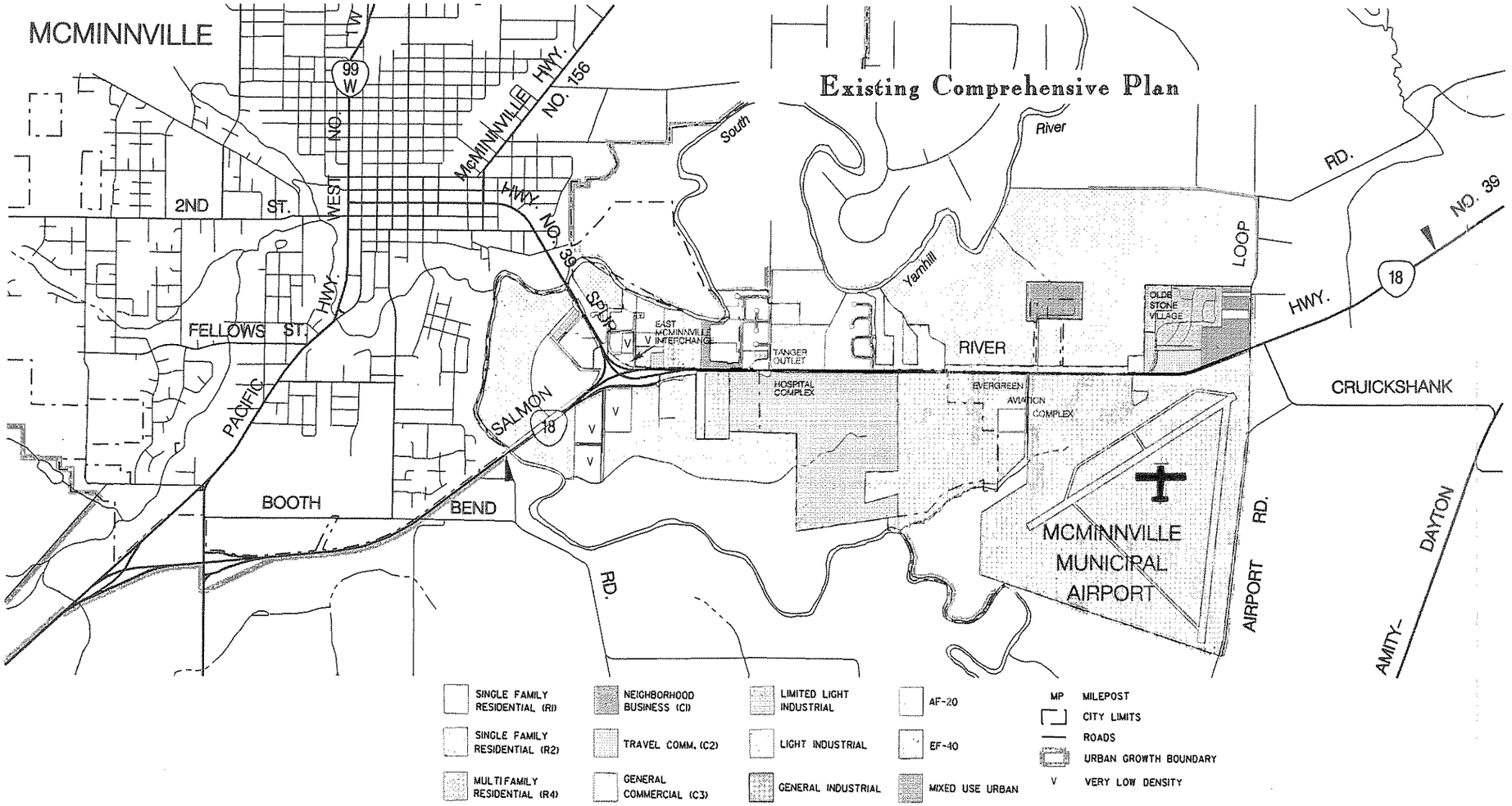
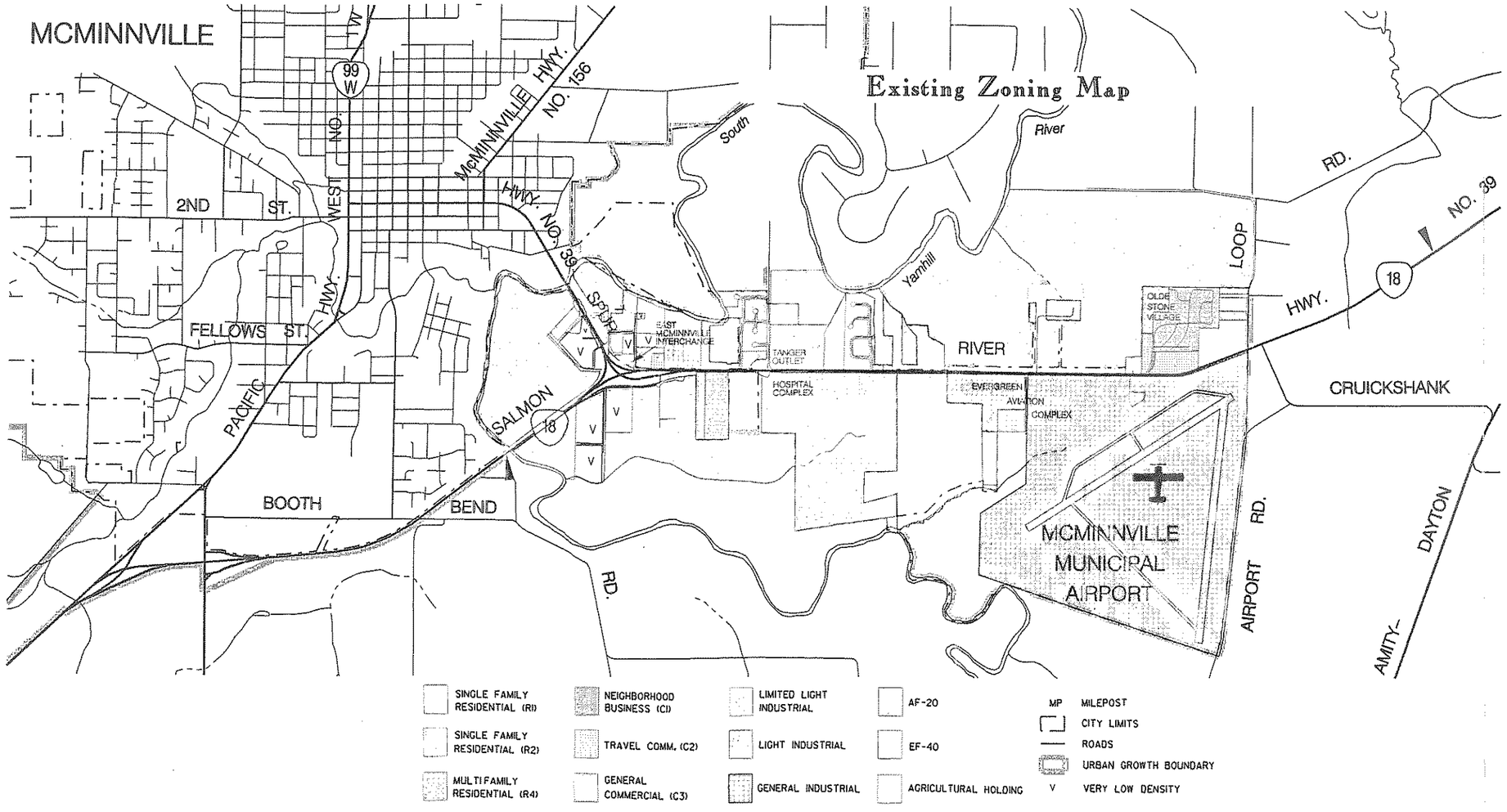


TRANSPORTATION DEVELOPMENT BRANCH
TRANSPORTATION DATA SECTION
INVENTORY & MAPPING

Highway 18
McMinnville

THREE MILE LANE CORRIDOR

Figure 2



TRANSPORTATION DEVELOPMENT BRANCH
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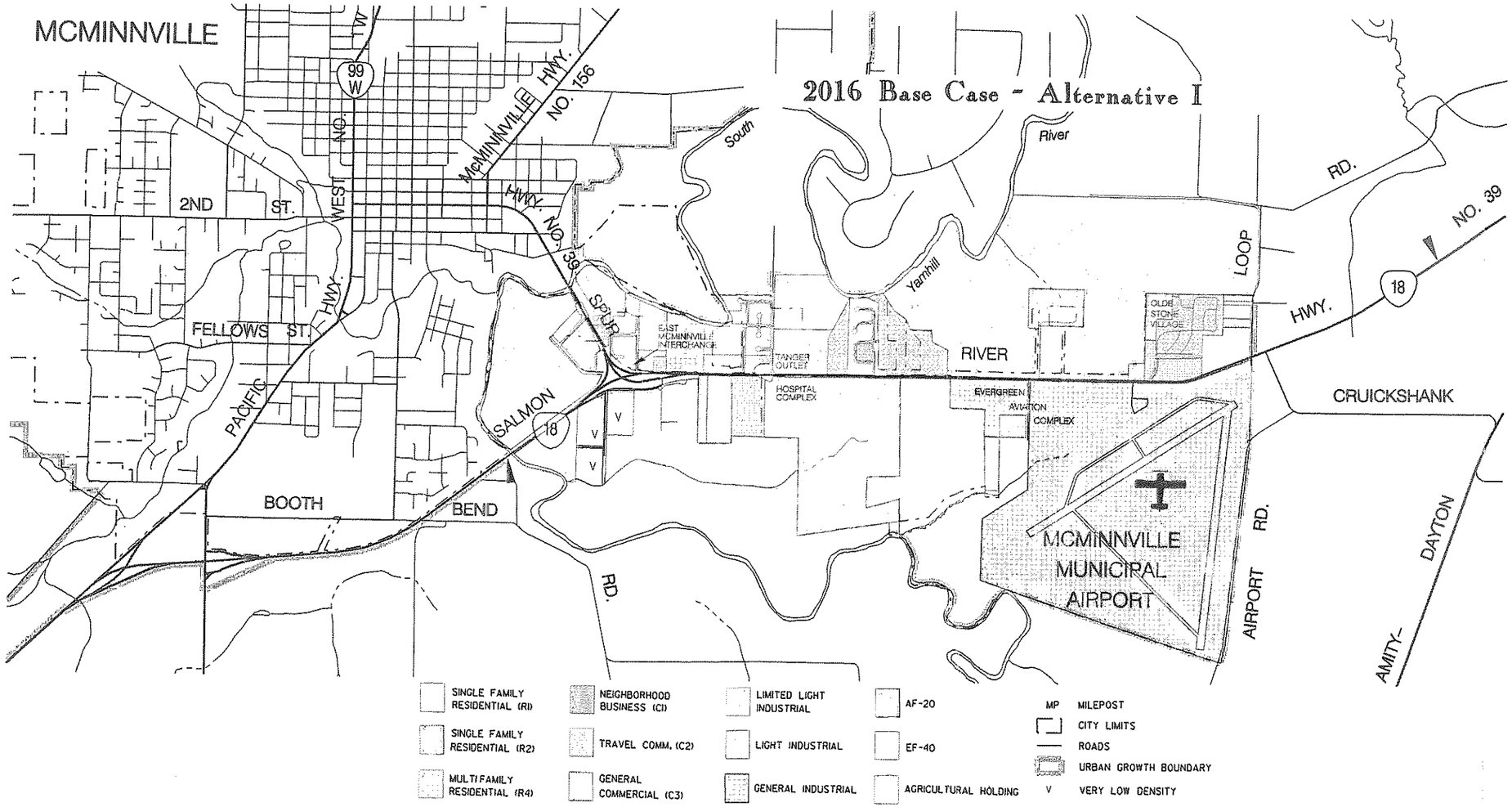
Highway 18
McMinnville

THREE MILE LANE CORRIDOR

Figure 3

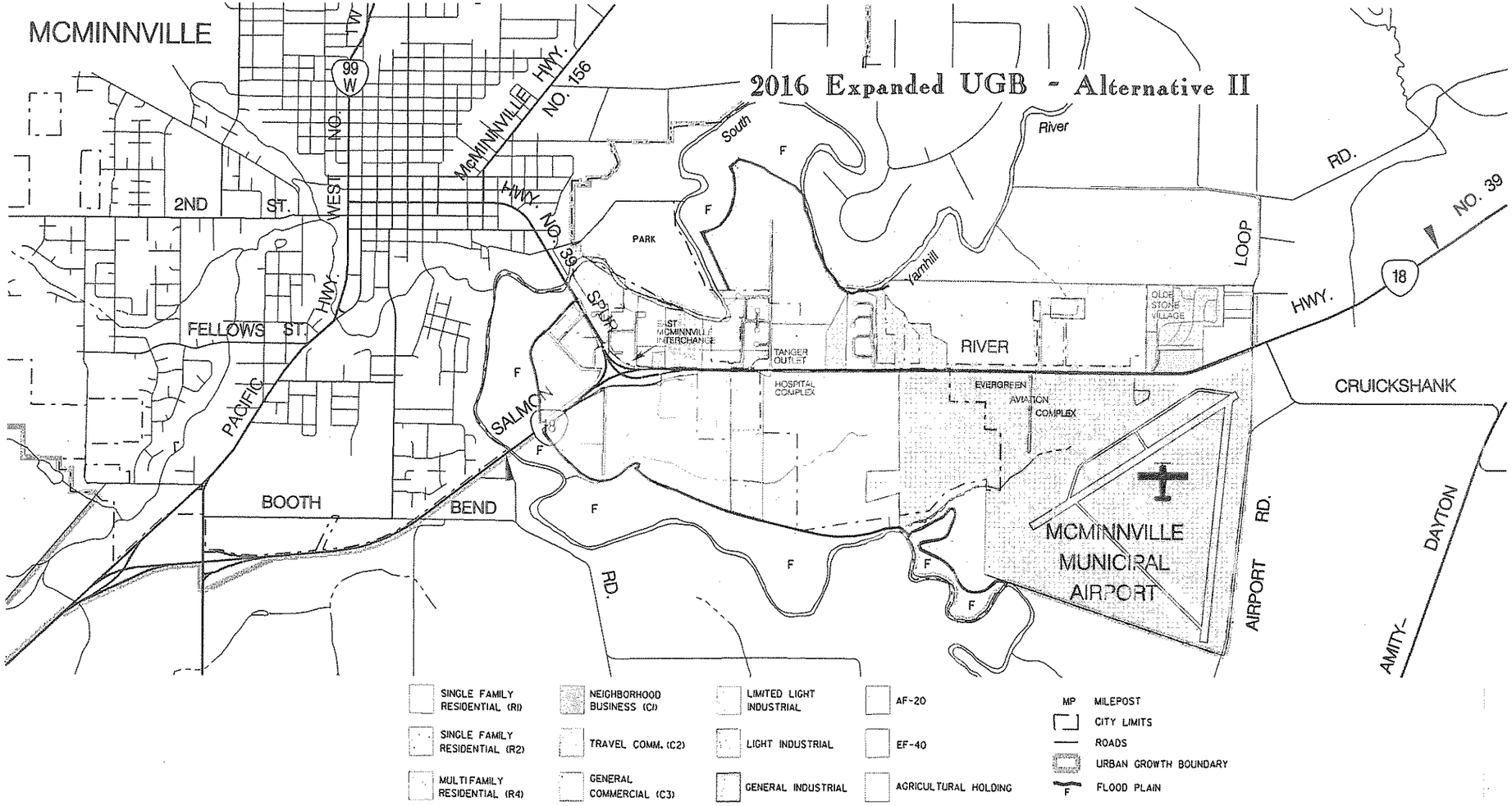


TRANSPORTATION DEVELOPMENT BRANCH
TRANSPORTATION DATA SECTION
INVENTORY & MAPPING

Highway 18
McMinnville

THREE MILE LANE CORRIDOR

Figure 4



TRANSPORTATION DEVELOPMENT BRANCH
TRANSPORTATION DATA SECTION
INVENTORY & MAPPING

Highway 18
McMinnville

THREE MILE LANE CORRIDOR

Figure 5

Trip Generation

Table 1 shows the amount of growth on the Three Mile Lane area between the 1991 Master Plan year and the 2016 Base Case Alternative. The Base Case Alternative assumes full usage of current land use designation. From the table, one can readily see the large potential for growth in the number of employees and the number of households that will be using the Three Mile Lane area for transportation. The growth is also consistent with the overall growth potential expected for the city as a whole. Table 2 shows the incremental change from the 2016 Base Case to the 2016 Expanded UGB. It depicts the additional increases in number of employees and households that can be expected to occur if the UGB is expanded and the increased area is fully used.

Table 1
1991-2016 Demographic Comparison*
Three Mile Lane Study Area
(TAZs 45-49, 69-71)

	Year		Change
	1991	2016	
EMPLOYEES			
Retail	51	311	260 (510%)
Industrial	22	2069	2047 (9305%)
Warehouse	0	753	753
Hospital	0	417	417
Government	10	17	7 (70%)
Office	0	318	318
School	0	0	0
Other**	313	583	270 (86%)
HOUSEHOLDS			
Single-Family	442	718	276 (62%)
Multi-Family	11	740	729 (6627%)

* Page 55, *EMME/2 Travel Model Development*, June 1995, Kittelson & Associates, Inc.
** Includes Evergreen Corporation.

Table 2
2016 Demographic Comparison
Three Mile Lane Study Area
(TAZs 45-49, 69-71)

	2016		
	Base Case	Expanded UGB Case*	Change
EMPLOYEES			
Retail	311	516	205 (510%)
Industrial	2069	2069	0
Warehouse	753	753	0
Hospital	417	417	0
Government	17	17	0
Office	318	318	0
School	0	0	0
Other**	583	593	10 (1.7%)
HOUSEHOLDS			
Single-Family	718	1296	578 (80.5%)
Multi-Family	740	740	0

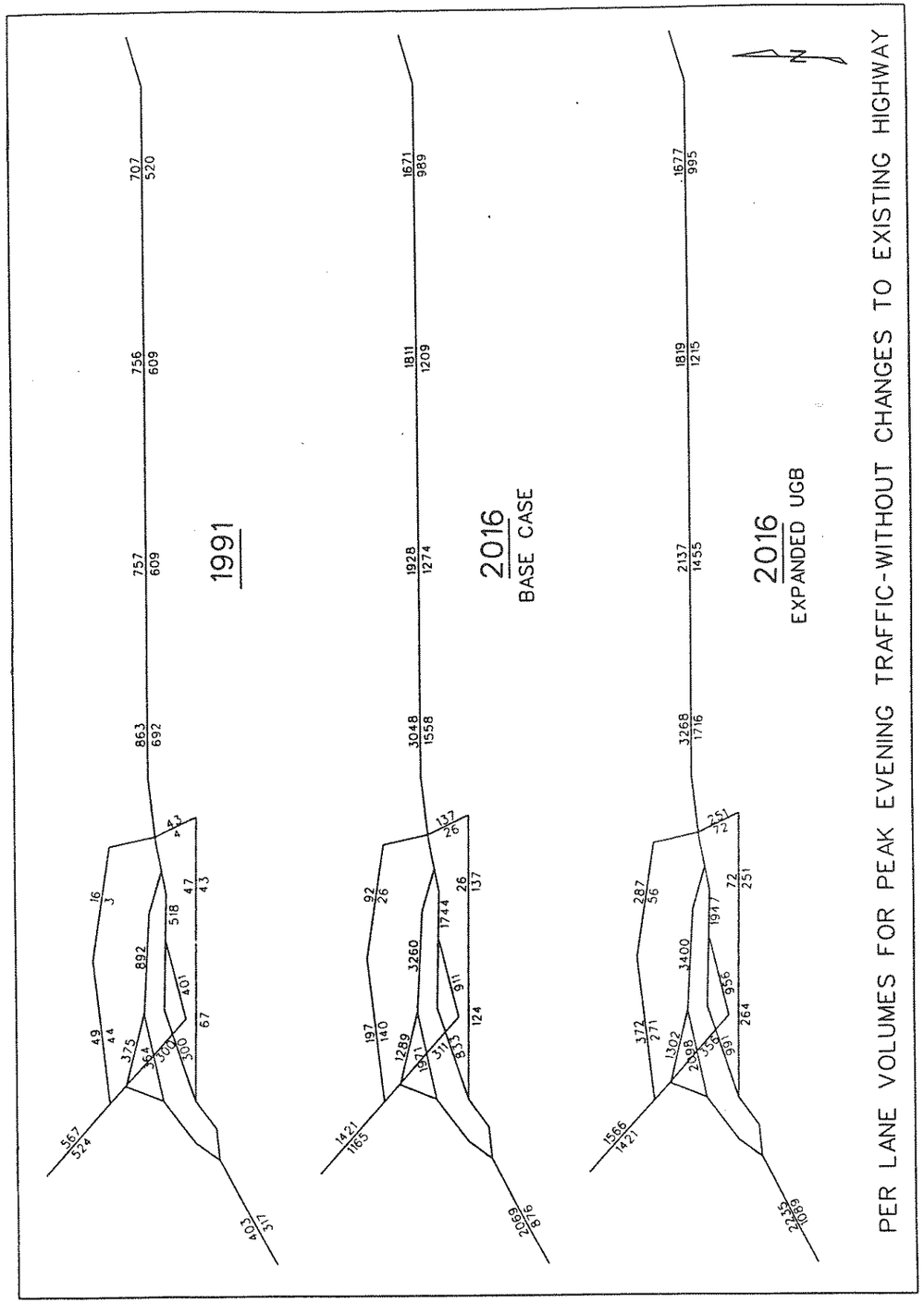
* Information extracted from page 73, *EMME/2 Travel Model Development*, June 1995, Kittelson & Associates, Inc.

** Includes Evergreen Corporation.

Based on the increases in internal travel from a growth in local employment and households and in external travel, a corresponding increase in evening peak traffic volumes will occur along the study area.

Figure 6 depicts in detail the volume increases. One can note the more than doubling of traffic on the eastern end of the study area with a five-fold increase on the western end.

Figure 6



Trip Distribution and Traffic Assignment

Trip generation rates and equations used for calibration of the basic computer model were applied to the 2016 demographic information by traffic analysis zone to determine trip generation origins and destinations. Base trip origins were averaged with base trip destinations (by purpose) to balance the origin and destinations. A traditional gravity model was used to distribute the peak hour trips generated by the city's future household and employment centers.

Of the vehicle trips originating internally, 87 percent are headed to another internal destination. Of those vehicle trips which begin externally, 60 percent are also headed to an internal destination. Thus, of all trips in the area, over 83 percent will involve travel internally. This emphasized the necessity to provide a means for travelers to accomplish travel within the study area. Table 3 depicts the trips.

Table 3*
2016 P.M. Peak Hour Trips
Internal and External Trips

Origin/ Destination	Internal	External	Total
Internal	17,033	2,457	19,490
External	2,228	1,466	3,694
Total	19,261	3,923	23,184

**Page 61, EMME/2 Travel Model Development, June 1995, Kittelson & Associates, Inc.*

Based on the trip distribution, the total 2016 Base Case Alternative evening peak hour traffic was assigned to various sections of the transportation network using an equilibrium assignment algorithm. *The results show that roadways in the corridor would approach or exceed capacity under the Base Case Alternative. This indicates that the traffic increases from growth in the corridor as well as increases from external traffic cannot be accommodated on the present roadways within an acceptable LOS.* Since the traffic forecast showed that projected traffic increases could not be handled with the present road system, the study's effort turned towards identifying the future needs and solutions for the area.[2]

[2]An in-depth technical review of the analysis used in traffic forecasting may be found in the document *EMME/2 Travel Model Development*; McMinnville, Oregon; Kittelson & Associates, Inc; June 1995.

Transportation Needs and Solutions

Needs

Technical Advisory Committee

With the information garnered from modeling future traffic, the study's efforts proceeded towards determining what was needed on the corridor to provide for growth through 2016 while still maintaining Level of Service (LOS) C.

A Technical Advisory Committee (TAC) was established to address the needs and determine possible solutions. The committee, composed of staff members from McMinnville, Yamhill County, Mid-Willamette Valley Council of Governments, ODOT Region 2, ODOT District 3, ODOT's Preliminary Design Section, and consultants from CH2M Hill and Kittelson & Associates, met five times during a six-month period. Between these meetings, sub-groups met to discuss and resolve specific technical matters.

Analysis

One of the committee's earliest steps was to analyze the significant intersections to determine:

- The current level of service at the intersections.
- What happens to the LOS at these intersections by 2016 if no changes are made to the roadway system (no-build).
- When the level of service at those intersections will decrease below LOS C.
- When the level of service decreases to LOS F.
- What intersection improvements could be made to maintain Highway 18 at LOS C.

A traffic operations analysis was conducted of twelve existing and proposed intersections critical to the highway's capability to carry traffic. The analysis used existing traffic counts and 2016 p.m. peak hour projections without expansion of the UGB. Future connections were tested to determine potentially viable solutions. The chart in Figure 7 depicts the analysis results.[3]

Although roads connecting to Highway 18 currently operate at much worse levels of service, the 1995 level of service on the Highway 18 corridor ranges between LOS A and B. Without further growth, it is anticipated these levels would be maintained for an extended period. However, as growth occurs and even with improvements to the intersection, Highway 18 at Norton Lane is expected to exceed LOS C in 2001, and LOS F before 2011. Also, with the no-build scenario, the

[3]**Note:** A more in-depth review of the analysis may be found in the CH2M Hill Technical Memorandum, *Three Mile Lane Traffic Operations Analysis*, June 7, 1995.

Highway 18 level of service will have deteriorated to LOS D at its intersection with Armory Way and to LOS B at its intersection with Cruickshank Road by 2016.

Solutions

Alternatives Selection

By the time preliminary review of impacts and analysis of the intersections was completed, two principle transportation alternatives had emerged. First, was an alternate bypass option (Appendix G). This concept envisioned rerouting the highway onto a new road constructed from an interchange west of Armory Way, proceeding southerly to the flood plain, then westerly to reconnect to Highway 18 west of the East McMinnville interchange. A variation of this concept began at a point east of the airport and then roughly followed the same track.

The second alternative reduces accesses to the highway so that the corridor area from Cruickshank Road west would eventually, after three phases of transportation development, only have two interchanges as direct access points. This concept includes developing a series of collector-access roads providing access to residential, commercial, or industrial property.

Although these alternatives were the two most promising, approximately a dozen other solutions or variations thereof were also studied. A description of these are contained in Appendix G. While studying these alternatives, the TAC recognized that encouraging multi-modal opportunities was important to the plan and that vehicular traffic solutions may impede the bicycle/pedestrian travel options. Therefore, as various solutions were studied, the TAC gave careful consideration to these other multimodal opportunities.

Because the alternate bypass and the collector-access road were the most promising options, the TAC began studying them in more detail. The process included compiling the advantages and disadvantages of each option, as shown on the following chart on page 35.

Since the typical collector-access road is located along areas where development is already occurring or has occurred and potentially has more chance of adverse impacts on existing development, it was decided to prepare its conceptional plan in greater detail. Given the financial framework which exists today, the capacity to phase the work was considered an important and major practical factor. Therefore, the TAC developed a plan which could be constructed in three phases. Implementation of the phases is triggered by anticipated degradations in levels of service. They can be compared against the existing system shown in Figure 8. The phases are:

Phase 1 (Figure 9)

- New exit ramp off the East McMinnville Interchange onto the existing frontage road.
- Realign southern frontage road and widen from new off ramp to Norton Lane.

(Text continues on page 36)

Figure 7
McMinnville Corridor Study Alternatives Analysis Without Urban Growth Boundary Expansion

This chart compares the effect of traffic for various road configurations

	Existing Conditions, 1995		No Build, 2016		Alternate A, Phase I, 2016 Signalized Intersection at N/S Road		Alternate A, Phase II, 2016 Folded Diamond at N/S Road		Alternate A, Phase III, 2016 Diamond I/C at Hwy 18 Spur	
Hwy 18 & Cruickshank Left Turn Lane Storage Requirements				Same as Previous		Same as Previous		N/A No Connection		N/A No Connection
LOS	A/F		B/F		B/F					
Type	Unsignalized		Unsignalized		Unsignalized					
Phase	N/A		N/A		N/A					
Hwy 18 & Armory Left Turn Lane Storage Requirements				Same as Previous				N/A No Connection		N/A No Connection
LOS	B/E		D/F		C/F					
Type	Unsignalized		Unsignalized		Unsignalized					
Phase	N/A		N/A		N/A					
North Frontage & N/S Road Left Turn Lane Storage Requirements		N/A		N/A						Same as Previous
LOS					A/E		B/F		B/F	
Type					Unsignalized		Unsignalized		Unsignalized	
Phase					N/A		N/A		N/A	
Hwy 18 WB Ramps & North Frontage & N/S Road Left Turn Lane Storage Requirements		N/A		N/A		N/A				Same as Previous
LOS										
Type										
Phase										
Hwy 18 & N/S Road Left Turn Lane Storage Requirements		N/A		N/A	NB=175/ln SB=325/ln EB=260/ln WB=50/ln	Exceeds LOS C in 2000		N/A Grade Separated		N/A Grade Separated
LOS					E					
Type					Signalized					
Phase					8					
Hwy 18 EB Ramps & N/S Road Left Turn Lane Storage Requirements		N/A		N/A		N/A				Same as Previous
LOS										
Type										
Phase										
South Frontage & N/S Road Left Turn Lane Storage Requirements		N/A		N/A						Same as Previous
LOS					A/E					
Type					Unsignalized					
Phase					N/A					
Hwy 18 & Norton Lane Left Turn Lane Storage Requirements	NB=50/ln WB=50/ln		Exceeds LOS C in 2001**	Same as Previous	Exceeds LOS C in 2007**			N/A No Connection		N/A No Connection
LOS	A		F		F					
Type	Signalized		Signalized		Signalized					
Phase	5		5		8					
North Frontage & Hwy 18 Spur Left Turn Lane Storage Requirements		N/A		N/A						
LOS					B/F					
Type					Unsignalized					
Phase					N/A					
Hwy 18 WB Ramps & Hwy 18 Spur Left Turn Lane Storage Requirements		N/A		N/A		N/A		N/A		
LOS										
Type										
Phase										
Hwy 18 EB Ramps & Hwy 18 Spur Left Turn Lane Storage Requirements		N/A		N/A		N/A		N/A		
LOS										
Type										
Phase										
South Frontage & Hwy 18 Spur Left Turn Lane Storage Requirements		N/A		N/A						
LOS					A/E		A/E		B/E	
Type					Unsignalized		Unsignalized		Signalized	
Phase					N/A		N/A		8	

** Storage Lengths Not Accurate at This Level of Service

A level of service (LOS) of "C" or better.

One or more roads drop below LOS "C". The first letter refers to the major road, e.g., Hwy 18 & Cruickshank = A/F. "A" is Hwy 18 & "F" is Cruickshank.

A LOS "E" or "F" on Hwy 18.

Alternate Bypass Alternative

Advantages

- Fully controlled facility
  - Will provide high LOS for through traffic
- Defines the limit of an expanded UGB
- Minimizes disruption to abutting built up property on much of the existing highway
- Provides for new bridges over South Yamhill River, extending capacity life of old bridges
- Simplicity
- Norton Lane could remain as location for north-south arterial

Disadvantages

- Cannot phase the construction for most of the road
  - Requires larger amount of funding at one time.
- Makes no improvement to the East McMinnville interchange
- LOS on existing Highway 18 will continue to degrade
- Potentially more adverse environmental impacts from flood plain and river crossings
- Requires Goal 12 exceptions for number of lanes and location where route is outside the UGB

Collector-Access Alternative

Advantages

- Fully controlled facility
  - Will provide high LOS for through traffic
- Can be phased to meet developing needs
- Good access via collector roads, while maintaining high LOS on highway
- Flexibility in siting local roads
- All-directional East McMinnville interchange
- All-directional new interchange
- Provides for bicycle/pedestrian traffic

Disadvantages

- Construction spread over many years
  - Perceptions and disruptions
- Requires right-of-way protection for many years
- Out-of-direction travel for some residents may increase until full service East McMinnville interchange is constructed
- Some Goal 12 exceptions may be necessary for any collector-access roads which are outside the UGB

- Move the southern frontage road's connection to Norton further south to allow room for left turn storage on Norton Lane. (In progress.)

- Restructure the Norton/Highway 18 intersection to add additional lanes. Upgrade signal.

- Improve the intersection at Cirrus Avenue.

- Place a signal at the location for a second (future) interchange (where north-south interchange road will connect).

- Construct east-west collector-access road between the north-south arterial and Kingwood subdivision area.

- Construct east-west collector-access road between the north-south road and Armory Way south of the National Guard facilities.

- Close direct accesses to Highway 18 where east-west collector-access roads are built.

- Add left turn lane on Highway 18 Spur onto existing frontage road.

Phase 2 (Figure 10)

- Align Nehamiah Lane across from frontage road, and install signal.

- Construct and reconstruct northern frontage road from near Atlantic Street to the previously constructed east-west collector at Kingwood.

- Replace signal at north-south road location with a full service interchange.

- Construct grade-separated jughandle intersection at Lafayette Highway and close Cruickshank Road connection to Highway 18.

- Complete collector access roads from new interchange north-south road to Loop Road.

- Complete collector-access roads from new interchange to Norton Lane and close Norton's connection to Highway 18.

- Construct collector-access road from Armory Way to Cirrus Avenue.

- Close all remaining direct access to Highway 18.

- Construct bicycle/pedestrian crossing.

Phase 3 (Figure 11)

- Reconstruct the East McMinnville Interchange as a full service interchange

(Text continues on page 45)

Figure 8

Existing Road System and Urban Growth Boundary

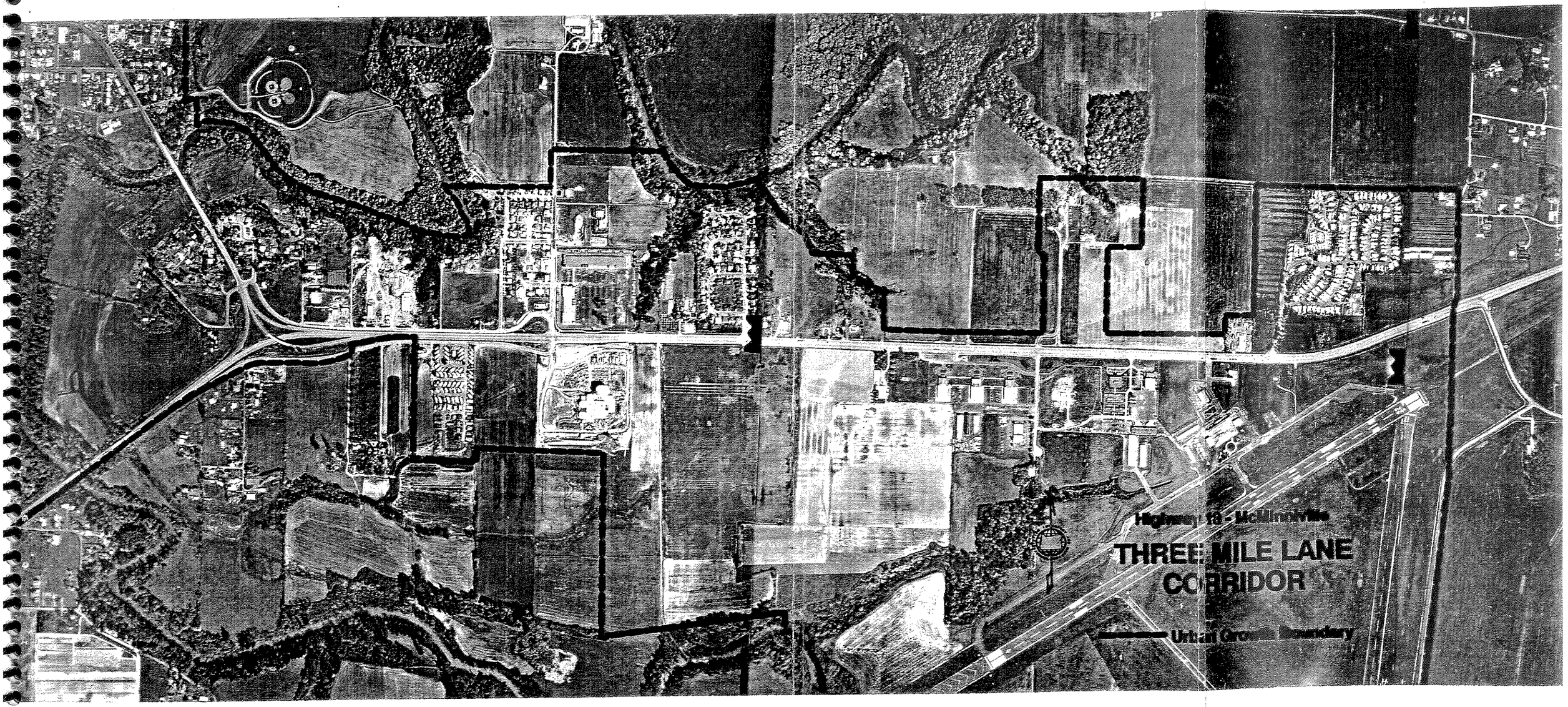


Figure 8

Figure 9
Collector-Access Alternative
Phase 1

Figure 10
Collector-Access Alternative
Phase 2

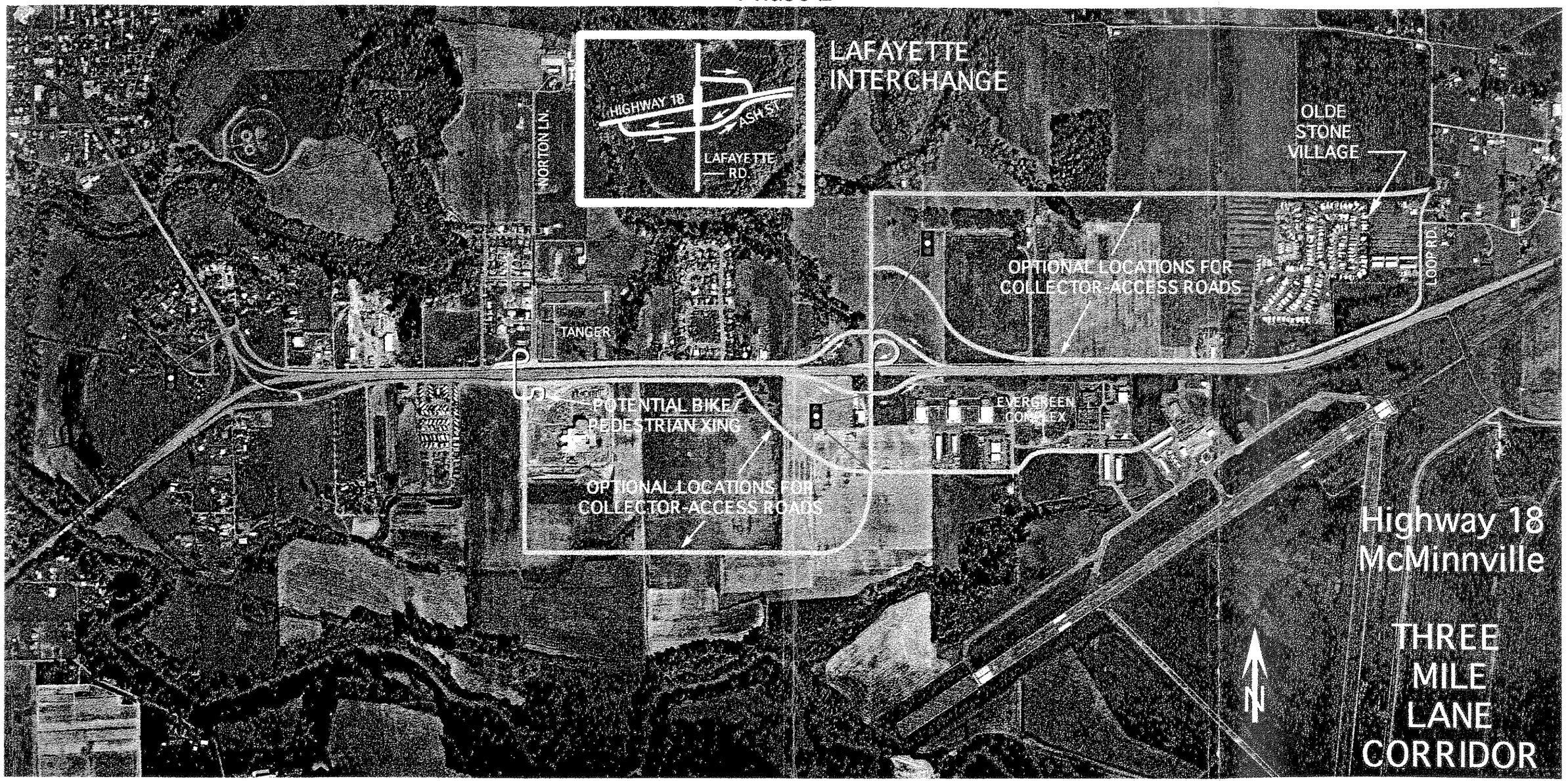


Figure 11
Collector-Access Alternative
Phase 3

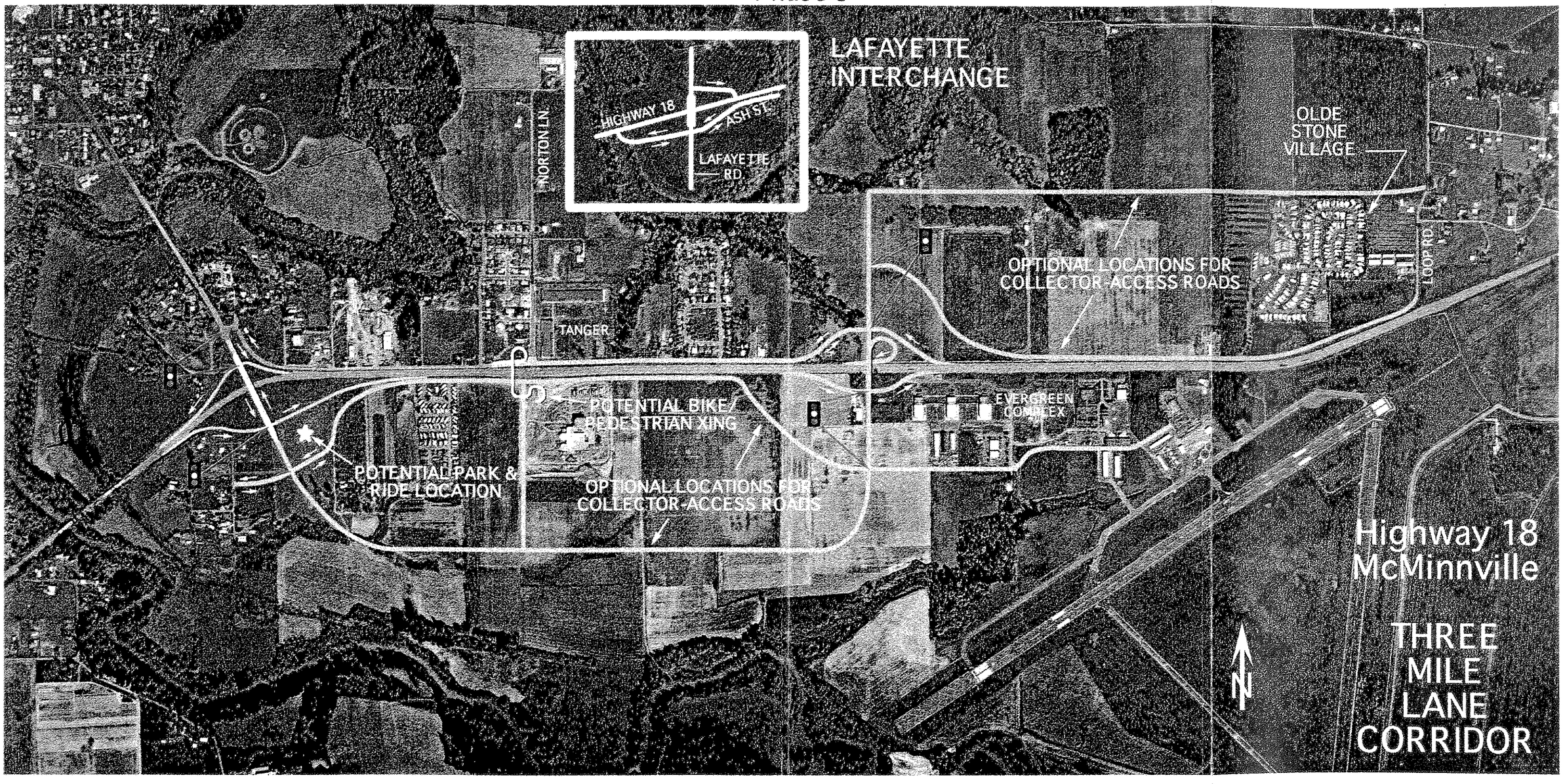


Figure 13

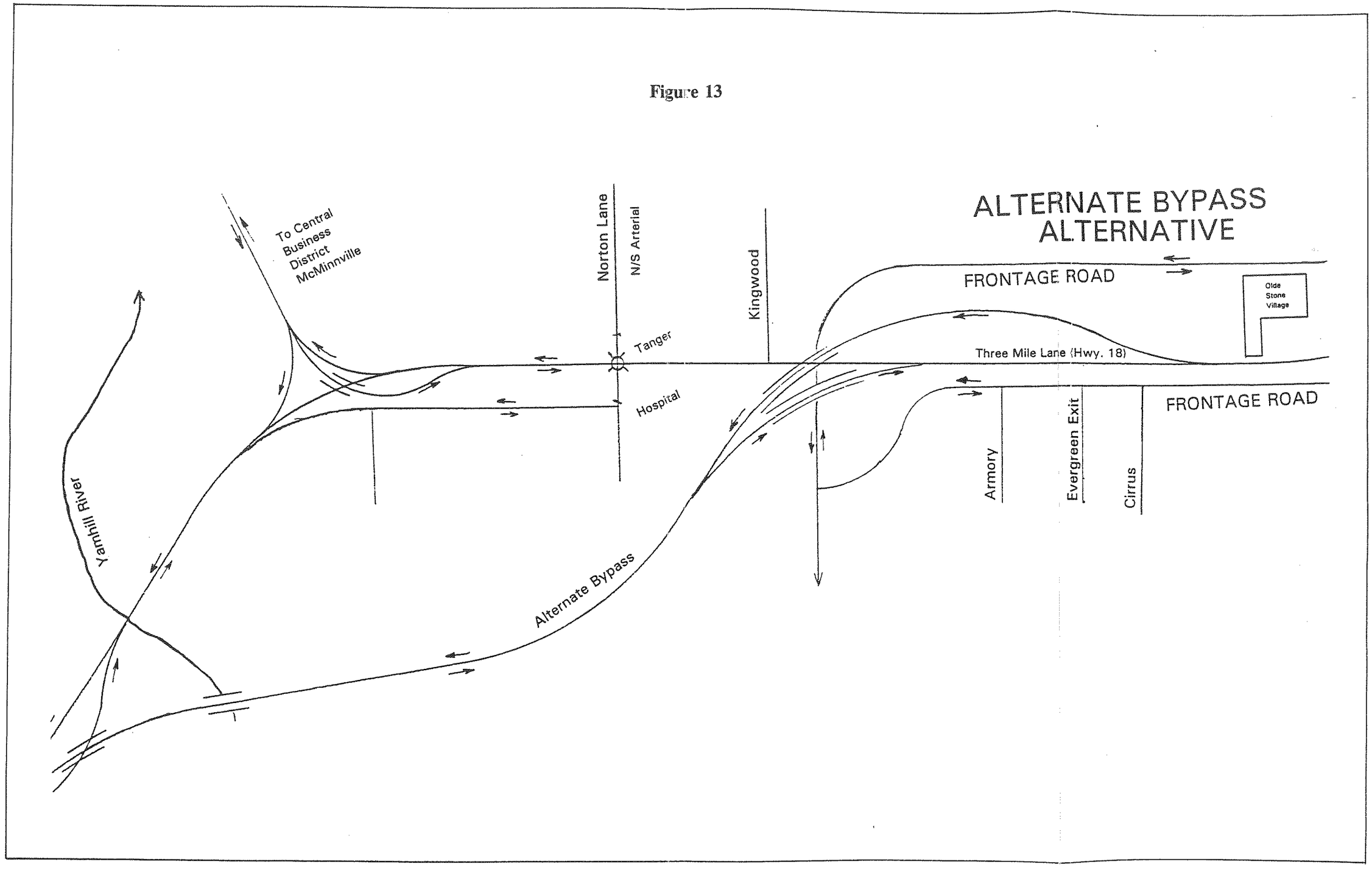


Figure 13

Cost and right-of-way estimates were made for each phase of the collector-access road network and are shown in Tables 4 and 5.

Table 4

Construction Cost Estimates for Collector-Access Road Network

	Cost Estimates
Phase 1	$2,700,000
Phase 2	$11,200,000
Phase 3	$6,600,000
Total	$20,500,000

Table 5

Cost and Right-of-Way Estimates for Collector-Access Road Network

	Estimated Right-of-Way Required	Estimated* Cost
Phase 1	14 acres	$900,000
Phase 2	56 acres	$2,000,000
Phase 3	24 acres	$1,300,000
Total	**94 acres**	**$4,200,000**

* It may be more practical to obtain some right-of-way necessary for Phase 2 at the same time as Phase 1.

Phase 1 requires approximately 14 acres at a construction cost of $2,700,000. Phase 2 occupies approximately 56 acres and costs approximately $11,200,000 to construct. Phase 3 uses approximately 22 acres with building costs of roughly $6,600,000. The total right-of-way needed is about 94 acres with a total rough construction cost of $20,500,000. The alternate bypass estimate for right-of-way acreage requires nearly the same as the collector-access road option with estimated construction costs being approximately $26,000,000.

The two alternatives were presented to the steering committee and the public for review and comment. After receiving public comments, the Steering Committee unanimously selected the collector-access road concept as the best option for meeting future needs.

Segmenting Phases

Both Phase One and Two can be segmented into components which can be implemented independently of the rest of the phase. This relies on intersection improvements in the near term to maintain LOS C and above, while deferring some improvements to a later date. Scheduling of the segments is discussed in the Implementation section of this document.

Landscaping

The Steering Committee strongly felt that the chosen alternative must allow for projecting a positive image of the area's livability. Therefore, it was extremely important to mitigate the impacts with landscaping. The TAC agreed that landscaping issues discussed in earlier sessions were possible and desirable in several areas, but that it would take project level planning detail to determined exactly where landscaping can be accomplished. Because of concerns over safety and maintenance responsibilities, the TAC did not reach consensus on the use of Highway 18's two-way center left turn lane for landscaping after the collector-access road system is completed. Some generic possibilities for other landscaping are shown in Figure 12.

Environmental

Environmental aspects were discussed and the TAC was cognizant of the environmental impact study (EIS) completed in March 1985. TAC members indicated that no environmental changes are known to have occurred along the corridor. An ODOT reconnaissance of the area supported the TAC's information. (The reconnaissance results are shown in Appendix D). Another opportunity to review environmental impacts will occur when major construction is scheduled and the required EIS is accomplished.

Travel Demand Management (TDM)

Demand Management techniques are generally accepted as a tactic to reduce automobile travel on a congested roadway. These techniques will become more productive as traffic congestion increases through a Level of Service D. A program applicable to the Three Mile Lane corridor will aid in reducing the growth of travel along this area. However, the commuting population to major metropolitan areas is gaining in significance and early applications of urbanwide TDM measures will have an even greater overall benefit with a spin-off benefit for the corridor. The McMinnville Transportation Master Plan contains a list of the various options likely to be successful citywide, with an estimate of the reduction in vehicle trips expected. Accomplishing the Master Plan's recommendations as soon as feasible will have a positive effect on the corridor.

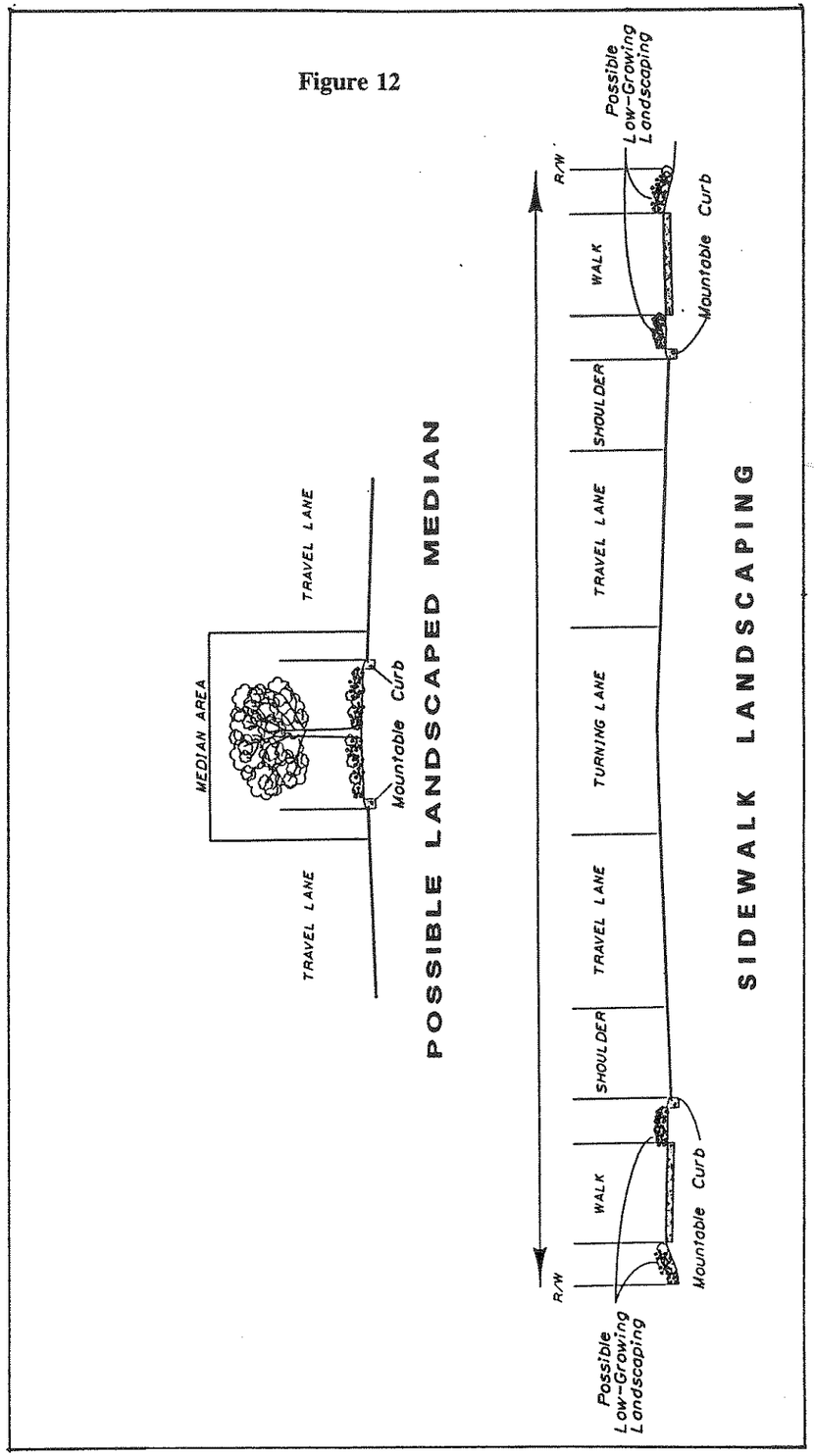
The study area's largest (400-500 employees) employer, Evergreen International Aviation, presently uses a vanpool program to move employees to various work locations in Portland and Salem. The hospital also has a significant number of employees (290); however, shift operation reduces the number of vehicles at peak hours. The city should work with current and new businesses to encourage a method of reducing employee traffic during critical traffic hours. One incentive already in place is a reduction in charges under the city's systems development charges when a developer can implement methods to reduce transportation needs. This study does recommend the city establish a carpool/vanpool program which extends beyond the corridor area. Adapting the self help or volunteer programs used by many agencies for many different programs, it is believed a self help carpool/vanpool program could be successful at minimal city cost.

Nonmotorized (pedestrian and bicycle) travel options are included in the collector-access road alternative by including sidewalk, bikeways, and overcrossing provisions along and between the collector-access roads.

Because TDM measures will be put into place as area development occurs, a dramatic effect is unlikely to be noticed; however, they will help to reduce expansion from local area traffic. The measures will indirectly benefit through traffic.

Recommendations for transit are also included in the implementation section. Presently, Yamhill County (YAMCO), a division of the Community Action Agency of Yamhill Co, Inc. (YCAP) provides an on-call (dial-a-ride) service which includes service to the hospital at its present location. It is expected the demand for service to the hospital will continue for the new location. YAMCO is monitoring and taking an active interest in development along the corridor and is preparing to meet the need as it arises.

Figure 12


POSSIBLE LANDSCAPED MEDIAN
MEDIAN AREA
TRAVEL LANE
TRAVEL LANE
Mountable Curb
TURNING LANE
TRAVEL LANE
SHOULDER
WALK
R/W
Possible Low-Growing Landscaping
Mountable Curb
SIDEWALK LANDSCAPING
TRAVEL LANE
TRAVEL LANE
SHOULDER
WALK
R/W
Possible Low-Growing Landscaping
Mountable Curb

Public Involvement

This section describes the methods and results of participatory sessions with citizens, elected officials, and staff members of McMinnville and Yamhill County.

Four public meetings were held to increase public awareness of the process and its relationship to the McMinnville Transportation Master Plan. Additionally, the meetings provided the public with opportunities to participate in problem solving by identifying issues, concerns, and solutions. Another aspect of the public involvement process was to set up a steering committee. The committee's membership consisted of county, city, and state staff along with representation from the county commission and city council. The steering committee provided direction to the study.

The steering committee held its first meeting in McMinnville in December 1994. The committee discussed the study's purpose and proposed public involvement workshops. The members received a 23-page information brochure on commuting patterns, population estimates, traffic counts, accident locations, and major property ownerships, etc. Preliminary discussions were held on land uses along the study area. The committee suggested names of individuals, groups, and organizations who should be invited to meetings and involved in the public planning process. The goals and objectives of the study were reviewed with the committee.

Refer to Appendix E for steering committee minutes.

The next major public involvement activity was an Open House on January 9, 1995 at the Army National Guard Armory on Armory Way, which connects to Highway 18. Two advertisements were placed, one week apart, in McMinnville's News-Register. Additionally, the paper published an article explaining and announcing the meeting. Flyers were mailed to households and businesses along the highway as well as other individuals, groups, and organizations that could have an interest in the study's outcome. The flyer explained the study's purpose, process, and time lines. It contained a description of the study area and a mail-in survey. Despite two inches of rain, the open house was well attended by 49 people. The open house featured a video of the study area; displays of current land uses, traffic counts, accident locations, and commuting patterns; and opportunities to identify problem sites and solutions. The News-Register covered the event and a photo feature was printed the following day.

The second steering committee meeting was held in McMinnville on January 19, 1995. Commissioner Dennis Goecks replaced Debi Owens as the elected member from Yamhill County. Mr. Richard Hayes, a member of the public who had expressed an interest in following the steering committee's work, also attended. The meeting

consisted of a review of the open house results (Appendix F) and discussion and acceptance of two future land-use scenarios for testing transportation alternatives. One scenario assumes buildup of lands within the existing urban growth boundary (UGB) as shown in the city's comprehensive plan. The second scenario assumes buildup of lands in an area larger than the existing UGB. The second scenario was included in the testing because the committee believes the city will have justification for an UGB expansion before 2016. The comparison of the two scenarios will allow a comparison of land use impacts when the road fails to meet level of service standards. The committee's goal is to maintain Highway 18 as a through road with a 55 mile-per-hour traffic speed capability.

After the second steering committee meeting, a summary of the open house and mail-in surveys was compiled and mailed to interested individuals. Following the mailing, there were some public inquiries (telephone, in-office) concerning the study.

Following the series of technical advisory committee meetings to develop transportation alternatives, the third steering committee meeting was held on June 8, 1995 to review the TAC's work. Following review, the steering committee expressed they were leaning toward the frontage road (collector-access) option primarily because it could be phased in as needed. They authorized staff to present the two alternatives at an open house to obtain public feedback.

Following the same notification procedures used earlier, the open house was held on June 19, again at the National Guard Armory with 58 individuals attending. Thirty-five of these completed a survey. Support for the frontage road (collector-access) alternative predominated. However, the alternate bypass alternative also gathered a strong following.

On July 12, members of the steering committee met with the owner and high-level staff members of Evergreen International, a major landowner and employer along the corridor, to discuss and review the developing transportation plan. The discussion resulted in clarification of the company's concerns and potential modifications that could alleviate their concerns. Some significantly different alternatives were also proposed by the Evergreen staff.

On July 13, the steering committee held its fourth meeting to review the public input and to discuss methods of implementation. The committee unanimously selected the collector-access alternative as the best all-around option. They also devoted considerable attention to modifications of collector-access roads east of the proposed new interchange and decided to present all the options as part of the draft plan which would be the next step in the study.

On August 22, rendering of the transportation concept for Three Mile Lane was also presented at the Yamhill Transportation System Plan Open House. Using this aid, there was an opportunity to discuss the collector-road alternative with several landowners along the corridor. The only major concern verbalized was a desire not to have to build any new network; however, there was a desire to continue the excellent road operation currently being enjoyed.

On October 27, following completion of the draft plan, the steering committee conducted a workshop to review the document and the transportation network. During the meeting, the steering committee expressed the desire to conduct a more detailed review of an underpass connecting Cruickshank and Loop Roads, a northerly shift of the existing highway, as well as a variation which would reroute traffic to a redesigned Lafayette intersection. Although this required an extension of the plan's completion date, the group felt it important to look at these possibilities. Additionally, they recommended a change in presenting the solutions so that the final solution is presented in the main report while the in-depth discussion of all the studied alternatives, solutions, modifications, and operations were placed in the appendix.

On December 7, following completion of the earlier tasks, the steering committee reconvened the workshop to review the new information. The review resulted in altering the easterly end of the collector-access road network by closing Cruickshank Road and routing traffic to an overpass jughandle intersection at Lafayette intersection. Additionally, the collector-access road to the airport was located behind the Evergreen facility.

On December 14, a follow-up meeting with Evergreen staff was held to review the recently studied options and modifications. The Evergreen staff felt the collector-access road south of their facilities alleviated their concerns in that area.

In January, individual meetings were held by the COG staff with the airport manager, the fixed base operator, and airport commission, Olde Stone Village, C. C. Meisel Trucking, Burch Concrete, and N.W. Logging to review and receive comments on the plan.

Implementation

This section is the "how to" portion of the plan. Some actions within a phase will have a traffic volume associated with them. The volumes are a "trigger" to indicate a necessary action is approaching and the need for the action must be revalidated. Action items relying on traffic count "triggers" are shown in *italics*. Some action items may carry over between groupings. All estimates are at 1995 costs. Jurisdictions (City/County) shown above the action items indicate those involved with the item. Individual action items using phrases such as "the state must . . ." or "the city should . . ." are used to indicate the lead agency and do not imply sole responsibility for the action or its financing.

Immediate Implementation

The items in this section are those which should be accomplished or started by state, city, or county agencies as soon as possible.

City/County

Hold required public hearings and adopt this plan as part of the McMinnville Transportation Master Plan and Yamhill County Transportation System Plan.

Adopt an agreement addressing automatic transfer of county roads to the city when a specific area is incorporated into the city.

State/City

Adopt an Intergovernmental Agreement which provides a mutually acceptable arrangement regarding access permits and development approvals.

County

YAMCO bus service should consider scheduled service to the corridor area with stops at the Willamette Valley Medical Center, Evergreen, Olde Stone Village, and the Tanger Factory Outlet.

City

Modify Ordinance No. 4131 to increase the setback from the centerline of Highway 18 for sections where a three-lane collector-access road bordering Highway 18 is anticipated. Presently, the ordinance requires a 120-foot setback which leaves one foot available for construction purposes. This requirement can be reduced by 14 feet for any area where the frontage road will be two lane and no future widening is anticipated.

Begin to investigate and develop a carpool/vanpool program.

Update the Airport Master Plan to show the location of collector-access roads from Armory Way to the FAA/FBO parking area.

Begin Goal 12 exception process for applicable sections of roads.

The action items listed in phases 1 through 3 are largely dependent upon the extent and rate development occurs along the corridor. Although development is currently proceeding at a rapid rate, it could slow or cease for several years. Should that occur, many of the more extensive construction projects may become unnecessary during the period of this report.

Phase 1A

State/County/City

Begin acquisition of right-of-way. Phase one of the system will require approximately 14 acres. **The land (approximately 26 additional acres) necessary for the proposed interchange between Highway 18 and the north-south arterial is critical and consideration should be given to acquiring this land as soon as possible.** Some methods to acquire right-of-way are:

- Outright purchase as property comes open for sale. If homes are included in the purchase, they should be rented to prevent vandalism and satisfy public concerns over waste of resources. It is possible homes could support other public programs such as low income housing programs. If land consists of small lots, the parcels could be loaned to neighboring landowners for gardens, etc. in exchange for weed and grass control.
  - Annually, real estate agencies in McMinnville and nearby communities should be notified of the state and city's interest in purchasing property for right-of-way. Additionally, landowners along the route could also receive notices.
- Enactment of an ordinance which requires, as a condition of development, dedication of right-of-way.
  - The amount of right-of-way is based on the amount of traffic development is expected to generate.
  - The procedure is similar to that used for systems development charges.
  - The city of Salem recently developed such an ordinance. This could be used as an example.

Annually, following adoption of this plan, the state should evaluate traffic counts at the intersection of Norton Lane and Highway 18. *If the combined, total weekday evening peak hour traffic count on the Highway 18/Norton Lane intersection is approximately 2,200 (a growth rate of 3.5% per year), additional turn lanes (up to two lanes from the southern approach and one additional on Highway 18's western approach), signal upgrade to eight phase operation, and the interim new connection from the East McMinnville interchange to the southern frontage road will be necessary.*

- When the traffic count reaches the level above, an updated level of service calculation should be completed to confirm the LOS is degrading as originally anticipated by this document. If verified, the state, city, and county should work to ensure the interim new connection at the East McMinnville interchange and a Norton Lane intersection/signal upgrade be accomplished before the Norton Lane intersection is forecast to exceed LOS C.
  - The city should prepare to realign and connect the southern frontage road from Norton to the interim East McMinnville connection.
  - The city should ensure the southerly leg of Norton will accommodate traffic needs (in progress).

- The total estimated cost is $1,300,000 with a breakdown as follows:
  - Modify frontage between Norton and Lawson - $950,000 (This figure does not account for the existing road, so actual costs are likely to be lower.)
  - New connection at East McMinnville interchange - $160,000
  - Upgrade and/or replace signal at Norton - $100,000
  - Adjust southern leg of Norton to accommodate additional vehicle stacking (in progress) - $110,000

Construct a left turn lane on Highway 18 Spur to northern frontage road.

City/County

Restrict conflicting left-turn movements between Loop Road and Cruickshank Road by blocking some movements, by aligning Loop Road across from Cruickshank Road, or by other means. Although an interim measure, several years of safe service can be gained before full closure of both roads is needed.

Phase 1B

State/City

If not already completed, construct interim new connection at the East McMinnville Interchange, modify existing frontage road, add turn lanes and upgrade signal at the Norton Lane intersection.

The city conceives a north-south arterial from Highway 99W to Highway 18 may be necessary at some time in the future. Even if the north-south arterial is not completed, the portion connecting to an essential interchange is necessary to provide land access along Three Mile Lane.

- Prepare to install a traffic signal on Highway 18 to accommodate the new connection. Estimated cost is $120,000.
- Concurrently, ensure construction of the collection access road from Kingwood to the north-south connecting road. This will result in the removal of five Highway 18 direct accesses. Estimated cost is $570,000.

Annually, following adoption of this plan, the state should evaluate traffic counts at the intersection of Highway 18, Armory Way, amd Cirrus Avenue. *If the combined, total weekday evening peak hour traffic count for the intersections is approximately 2,000 vehicles, additional lanes may be necessary to maintain an LOS above C.*

- When the traffic count reaches the level above, a level of service computation should be accomplished to confirm the LOS is degrading as anticipated by this document.
  - Begin planning for construction of the collector-access road between Armory Way and the north-south connecting road, and following construction, close Armory Way. The estimated cost is $520,000.
  - Accomplish improvements to Cirrus Avenue. The estimated cost is $43,000.

Finalize location of future bicycle/pedestrian overcrossing of Highway 18. The general location is presently anticipated to be near Norton Lane.

Begin development of environmental documentation for the proposed interchanges.

Phase 2

State

Annually, after construction, the state should evaluate traffic counts at the intersection of Highway 18 and the north-south road, and at the intersection of Highway 18 and Norton Lane. *If the combined, total weekday evening peak hour traffic count for the N-S/18 intersection is approximately 2900, the interchange improvement segment of Phase 2 may be necessary to maintain LOS C through 2016. If the combined, total weekday evening peak traffic count for the Norton/18 intersection is 3000, closure of Norton and rerouting to the north-south arterial along connecting collector-access roads is necessary.*

- A level of service computation should be completed to verify whether the LOS for both intersections is degrading as anticipated by this document.
  - The estimated cost is $5,700,000 for the interchange.
  - The city should concurrently plan for the construction of the collector-access road between Armory Way and Cirrus Avenue to coincide with interchange construction.
  - The city should ensure the collector-access roads from Norton Lane to the north-south interchange are in place. The estimated cost is $1,800,000.

If warrants are met, place a signal at the intersection of Highway 18 Spur with the northern frontage road and Nehamiah Lane. Estimated cost is $120,000

State/City

State constructs Highway 18 and north-south arterial interchange, replacing signal. City completes collector-access road from Armory Way to Cirrus Avenue (estimated cost is $390,000). State/city constructs pedestrian/bicycle overpass (estimated cost is $700,000).

State/city/county constructs park-and-ride lots near convenient accesses to Highway 18 (estimated cost is $2,000 per space).

- Close the Cirrus Avenue intersection with Highway 18.
- Close Norton Lane intersection with Highway 18, and all private intersections between Norton Lane and the north-south arterial.

State/County/City

Annually, the state should evaluate traffic counts at the intersection of Highway 18 and Loop/Cruickshank Road. *If the combined, total weekday evening peak hour traffic count for the Loop/Cruickshank/18 intersection is approximately 2000, it indicates the closure of Loop and Cruickshank Roads direct access to Highway 18 may be necessary to maintain LOS C.*

- A level of service computation should be accomplished to verify the LOS for the intersection is degrading as anticipated by this document. The county should begin detail planning for closure of Loop and Cruickshank Roads connection to Highway 18, connection of Loop Road to a northern collector-access road between Loop Road and the interchange's connecting road and connection of Cruickshank Road to Lafayette intersection.
  - The estimated cost of a collector-access road from Loop Road to the north-south interchange road is $2,160,000.
  - The estimated cost of an overpass with jughandle approaches at Lafayette intersection is $2,500,000.

Phase 3

State

Conduct an analysis of the East McMinnville interchange to evaluate its LOS. If LOS is degrading as anticipated, the state and city should begin actions to obtain a full service interchange. The estimated cost is $5,250,000. Modifications to frontage roads in the immediate vicinity of the interchange is an additional $1,750,000.

State/City

Construct full service interchange in place of the present East McMinnville interchange.

Every five years after adoption of this plan, the state, county, and city should review progress towards completing the action items contained herein.

Financing

This portion of the Implementation section describes methods available for funding proposed projects. Many of these projects will require funding from more than one jurisdiction, even when only one jurisdiction has responsibility for and authority over the improvement being made. This situation results from a concept that cities and/or counties who wish a project to be constructed by the state can enhance the probability of the work being done if they contribute to project financing. Also, there is a concept that those who generate the need for improvements should either pay or share in the costs. Consequently, developers are also expected to share the expenses of new construction, either through right-of-way dedication or roadway construction, or both. A portion of the land necessary for the projects is currently in county jurisdiction and it is to the county's advantage to participate in funding projects which directly or indirectly benefit county residents. This portion of the plan will address these possibilities.

Systems Development Charges (SDCs)

ORS 223.297 requires local governments who impose SDCs to:

- Complete a plan that lists the capital improvements that can be funded by SDC fees, and the estimated cost and timing of each improvement. This plan meets that requirement.
- Limit the expenditure of SDC fees/charges to those capital improvements that are required to increase capacity because of uses generated by current or projected developments.
- Place the SDCs collected in a separate account and provide an annual accounting of revenues received and projects that were funded.
- Use a resolution or ordinance to establish the methodology for calculating the charge and make it available for public inspection.

The City of McMinnville's Ordinance No. 4585 (Amending Ordinance No. 4495, Chapter 3.10 of the Municipal Code) adds the provisions necessary to implement a systems development charge for transportation and Resolution No. 1995-14 provides the methodology used to establish the transportation systems development charge for work projected by the 1994 Master Transportation Plan. This resolution can be modified or amended to include a systems development charge for the work projected under this plan.

Local Improvement Districts (LID)

Another city option is formation of a local improvement district for the area in the study. This can be initiated by the property owners or by the city, subject to remonstrance (protests). These districts can be used when the benefit of the work is essentially confined to one area. With the LID, the cost of a project is distributed to each property according to the benefit that property receives. Since the work proposed in this plan is phased to accommodate increases in traffic from development, it may be difficult to determine benefit to properties that are not yet developing. The cost distributed becomes an assessment or lien against the property. It can be paid in cash or through assessment financing. McMinnville Municipal Code, Chapter 3.12, contains some information relative to this financing option.

Urban Renewal Districts

Oregon Revised Statutes 457 allows an Urban Renewal District to be formed for the corridor area. This allows the district to issue tax increment bonds for the work. Since these bonds use dedicated property tax increases resulting from increased valuations of property in the district to pay for the public improvements, they are influenced by the property tax cap. The 1994 rate is $8.44/$1,000 which leaves $1.56 available.

Exactions (Conditions of Development)

System improvements can be required as a condition of development. The process requires the city to demonstrate how the improvements they require are necessary to accommodate the impact generated by the new development.

Miscellaneous

There are other mechanisms available to finance the corridor work. Gas Tax and Vehicle Registration Fees are the most traditional methods. However, the city and the county typically exhaust these funds accomplishing ongoing maintenance, repair, and minor construction projects. The local jurisdictions do have authority to impose local gas taxes. The McMinnville Transportation Master Plan estimates a one cent county gas tax would generate over $340,000 of which the city's share would be approximately $92,000.

Some economic development programs also offer a source of funds. The Immediate Opportunity Grant program managed by ODOT provides a maximum of $500,000 for public road work associated with an economic development related project of regional significance plus the underlying project must create primary employment. Additionally, although lesser amounts will be considered, the grantee should provide an equal local match. Another economic development related source of funds is the Special Works Public Works Fund. This fund provides grants and loans for public work which supports private projects that result in permanent job creation or job retention. Loans are emphasized in this program and are available up to $11 million for a maximum of 25 years, unless the project's life is shorter. The maximum grant is for $500,000, but may not exceed 85% of the project cost.

State

The above methods of financing are those used by local, city, and county jurisdictions. The state has fewer options and relies almost exclusively on gas tax, vehicle registration fees, and federal transportation programs for funding projects. However, the state has begun to enhance its funding by requiring contributions from local jurisdictions or cost sharing when developments have significant traffic impacts. The latter method is being used for improvements on U.S. Highway 101 near Lincoln City. These cost sharing techniques may become more prevalent if federal funds decrease in the future.

The federal funds presently available under the Intermodal Surface Transportation Efficiency Act of 1991 will terminate in 1997 and a new funding bill will need to be authorized. It remains to be seen whether a new bill will be more or less flexible, or whether more or less funds are available. ISTEA is more flexible for the state than the previous program since more authority was delegated. The perceived nationwide success of this approach will help determine if restrictions are loosened further or tightened. Overall funding levels and the portion available to various state governments are influenced by many factors. While one may presently speculate, the uncertainty will be resolved by the time projects in this plan are constructed.

Many of these uncertainties also prevail at the state level. Historically, increases in state gas taxes generally do not provide more than a catch-up for inflationary pressures on the cost of construction or to provide a means to correct deferred maintenance. In general, it is expected the state will continue its course of requiring some contributions or cost sharing before significant work such as interchanges are constructed.

Appendix A: Definitions and Acronyms

Access Management: Measures regulating access to streets, roads, and highways from public streets or roads and private driveways. Measures may include but are not limited to restrictions on the siting of interchanges, restrictions on the type and amount of access to roadways, and the use of physical controls, such as signals and channelization including raised medians to reduce impacts of approach road traffic on the main facility. (Ref. OAR 660-12-005)

Arterial Highway: A highway primarily for through traffic, usually on a continuous route.

Average Daily Traffic (ADT): The annual average two-way daily traffic volume. It represents the total traffic for the year, divided by 365.

Collector-Access: A term used to describe a road or system of roads providing land access.

Corridor Plan: A long-range plan for managing and improving transportation facilities and serves to meet needs for moving people and goods.

Demand Management: Actions which are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity. Methods may include but are not limited to the use of alternative modes, ridesharing and vanpool programs, and trip reduction ordinances. (Ref. OAR 660-12-005)

Divided Highway: A two-way highway on which traffic traveling in opposite directions is physically separated by a median.

Frontage Road (Local Service Road): A local street or road located parallel to an arterial highway for service to abutting properties for the purpose of controlling access to the arterial highway.

Interchange: A facility that separates intersecting roadways and provides directional ramps for access movements between the roadways. The structure and the ramps are considered part of the interchange.

ISTEA: The federally enacted Intermodal Surface Transportation Efficiency Act of 1991 which provided authorizations for highway, highway safety, and mass transportation for the following six years.

Level of Service: A qualitative measure of the effect of a number of factors on transportation service including speed and travel time, traffic interruptions, freedom of movement, safety, driving comfort, and convenience.

Modes of Transportation: Mass transit, air, water, pipeline, rail, highways, bicycle, and pedestrian. The terms "modes," "mode connectivity," and "intermodal" refer to these transportation means.

Rural: Any area not included in a business, industrial, or residential zone of moderate or high density, whether or not it is within the boundaries of a municipality.

TPR: The state Transportation Planning Rule contained in Oregon's Administrative Rule, Chapter 660, Division 12, which implements the statewide planning goal 12 (Transportation).

UGB: Urban Growth Boundary. A line drawn around a geographic area which separates urban use lands from resource, or rural, use land.

Urban: Any territory within an incorporated area or with frontage on a highway which is at least 50% built-up with structures devoted to business, industry, or residences for a distance of a quarter mile or more.

Urbanizing: Areas within an urban growth boundary that are undeveloped.

Appendix B: Document Listing

State of Oregon

1991 Oregon Highway Plan	ODOT	June 1991
Oregon Transportation Plan	ODOT	September 1992
State Agency Coordination Program	ODOT	December 1990
1993-98 Six Year Transportation Plan (Proposed)	ODOT	May 1992
Handout, Interchange Styles	ODOT	January 1987
Traffic Volume Tables	ODOT	1989, 1990,
1991, 1992		
Handout, General Corridor Plan Process	ODOT	August 1992
Handout, Transportation Corridor Planning	ODOT	November 1992
Handout, ODOT Transportation System Planning Guidelines	ODOT	October 1992
Access Oregon Highways Corridor Studies	ODOT	February 1990
Highway Compatibility Guidelines	ODOT/UO	June 1987
Draft EIS- East McMinnville Inter.	ODOT/FHA	March 1984
Draft Transportation System Planning Guideline	ODOT	December 1993
Interoffice Memo: Proposed Cruickshank Road Underpass Salmon River High, McMinnville, Yamhill County, CO37-5162-007	ODOT	August 1995
Letter: Highway 18 McMinnville Refinement Plan, Preliminary Summary of Environmental Issues	ODOT	October 1995
Interoffice Memo: Three Mile Lane Corridor Right of Way Estimate	ODOT	October 1995

City of McMinnville

McMinnville Community Hospital Transportation Impact Analysis		June 1994
City of McMinnville Transportation Master Plan		June 1994
McMinnville Municipal Airport Master Plan		December 1989
McMinnville Comprehensive Land Use Map		August 1994
McMinnville Zoning Map		November 1993
McMinnville Comprehensive Plan Vol II, Goals and Policies Vol III, Implementing Ordinances		Varied
Zone Change Request - Lot 100,4,4,22D		November 1994

Yamhill County

Yamhill County Road Management Plan		February 1992
Yamhill County Comprehensive Plan, 1974 with addendum		February 1978
Draft Yamhill County Transportation System Plan		July 1995
Yamhill County Zoning Ordinance		
Yamhill County Zoning Map		September 1992
Aerial Maps		September 1992
Property Maps		Varied
Intergraph Disc MWVCOG.DGN		1994
Soil Survey of Yamhill County		January 1974

Miscellaneous

Intergovernmental Agreement #12,677 System and Corridor Refinement Study, pages 7-17	COG/ODOT	August 1994

Implementing Effective Travel Demand Management Measures	USDOT	September 1993
1990 Census, Transportation Data	USDOC	1990
Yamhill Community Action Program Bus Schedules (YAMCO & LINK)	YCAP	1994
Chapter One, Overview of EMME/2	Manuf.	May 1994
Roadway Corridor Map Environmental Screening	NCDOT	April 1991
ATEP Trans. Analysis - Tanger Factory Outlet	ATEP	December 1992
Kittelson Technical Memorandums: – McMinnville Community Hospital Highway 18 Access Design – Norton Lane/Highway 18 Traffic Threshold Analysis	Kittelson	June 1995 July 1995

Appendix C: Study Requirements

McMinnville Transportation System and Corridor Refinement Study

Salmon River Highway (OR18, OR233)
South Yamhill to Lafayette Highway Section

Introduction

This statement of work outlines the tasks to be completed to analyze a section of the Salmon River Highway, also known as Oregon Route 18 and Oregon Route 223 (hereinafter referred to as "OR18") Transportation Corridor between the South Yamhill River and the Lafayette Highway. The corridor refinement study (hereinafter referred to as "Study") will supplement the work already completed in the Draft McMinnville Transportation Plan (hereinafter referred to as "Plan"). The Study will provide a facility management and improvement document (hereinafter referred to as "Document") which will become part of the Plan. It will be adopted as part of the local comprehensive plans by the City of McMinnville ("City") and Yamhill County ("County").

The Study will accomplish several objectives:

(1) General corridor planning
(2) Identify the transportation facilities and improvements necessary for acceptable movement of goods and people within and through the area
(3) Consideration of alternative modes of travel
(4) Transportation demand management (TDM), transportation systems management (TSM), and combinations of these with existing modes of travel in the corridor
(5) Evaluate a "no build" alternative, one that does not result in new transportation facilities
(6) Short and long term improvements to facilities in response to state, regional, and local needs

(7) Identify strategies required to transition from existing conditions to what will be necessary to accommodate the anticipated transportation needs of the future
(8) Evaluate replacement of existing intersections with one or more separated grade interchanges
(9) Evaluate a system of local road connections to future interchanges

The Study and its results will be accomplished consistent with the provisions of the Oregon Transportation Planning Rule (TPR) and the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). Amendment of local comprehensive plans by the City and County to adopt the findings herein, may extend beyond this date.

Refinement Area Identification

The Study area encompasses the land area between the South Yamhill River and the Lafayette Highway reliant upon OR18 for direct or indirect property access. A more precise area will be identified at a later point to accomplish this Study.

Goals and Objectives for the Study Plan

Goals and objectives will need to be based upon providing acceptable operation of transportation facilities using the Level of Service (LOS) concept. An acceptable LOS for this section of OR18 is established by the Oregon Transportation Plan as LOS "C", based upon volume/capacity ratios. LOS standards for other studied facilities will be established in the Plan.

The alternative that best responds to identified transportation needs may require transition of this section of OR18 into a highway which meets the 1991 Oregon Highway Plan's Category Two Access Management Standards. If this occurs, the following tasks will need to be performed:

(1) Identify the general location(s) for a future separated grade interchange
(2) Identify future network of roads providing property access within the refinement area, including a future McMinnville beltline road connecting to Highway 99W near the northeast city limits
(3) Identify road network connections between the existing and proposed interchanges
(4) Develop the facility management plan which will allow the transition to occur
    (a) Identify when certain transition steps need to be taken, and
    (b) How the land access function will be reduced over time
(5) Provide for transition facility management between the current conditions and the future solution

(6) Provide for multimodal facility improvements determined to be needed

Public Involvement

The outcome of the Study's public involvement process will be to increase public awareness of the Study, its purpose, necessity, and relationship to the Plan, and to provide a forum to share ideas and to identify issues and concerns. Agency involvement will consist of a steering committee representing the City, County, and State.

General public involvement will be ongoing throughout the Study. A minimum of four advertised public information workshops as well as other means of disseminating information to the public will be provided. The first meeting will focus on identifying community transportation issues, concerns, goals, and objectives. The second and third meetings will occur during preparation and evaluation of alternatives, and the final meeting will present the prepared document. The need for further public meetings during the study will be decided by the steering committee. Additional means of involving the public, such as newsletters, fact sheets, newspaper inserts, utility bill inserts, and other techniques will be used if considered appropriate and reasonable by the steering committee.

Determine Constraints on Facility Development

Information from the City, County, and state and federal agencies will be used to identify environmental, social, economic and energy constraints on future facility development. Information to be studied will include applicable federal, state and local regulations, plans and policies, wetland locations, significant natural areas, historic buildings, cemeteries, parks, schools, scenic areas and other environmental features that could affect the location of future transportation facilities.

Review Existing Plans, Policies and Standards

Regulations, plans and policies pertinent to the analysis of alternatives and facility development will be identified and incorporated as the framework for the Study's development. Land use, demographic and economic data used in preparation of the Plan will be reviewed for validity and to ensure consistency with the goals and objectives of this Study. If determined necessary, the Plan's information will be updated or revised for use in the Study.

A land use conversion sensitivity analysis will be completed for all land in the refinement area. The analysis will identify existing land uses and underutilized or vacant land, and will consider consequences on transportation facilities of potential

conversion of rural and urban land use (amendment of land use designations) to more intensive activities. Land within the urban growth boundary also will be evaluated using a structure value/land value analysis based upon Yamhill County Assessment records. The effect of existing land use designations, development review provisions, engineering standards and other development requirements will need to be incorporated into the analysis.

Regulations, plans and policies applicable to the study include:

(1) 1991 Intermodal Surface Transportation Efficiency Act
(2) National Environmental Policy Act
(3) The Oregon Transportation Plan
(4) Adopted modal plans and applicable administrative rules
(5) ODOT Interchange Management Policy
(6) McMinnville Comprehensive Plan
(7) McMinnville Airport Master Plan
(8) City of McMinnville Three-Mile Lane Planned Development Overlay Ordinance #4131
(9) Yamhill County Comprehensive Plan
(10) Oregon Statewide Planning Goals and adopted administrative rules, including the Transportation Planning Rule requirements

Inventory Existing Transportation Systems and Facilities

This inventory will identify existing public and private facilities within the refinement area, including bicycle and pedestrian facilities, bridges, public transit and intercity bus operations, and airport facilities. Inventory activities will also identify any existing conflicts between transportation modes. Inventory work is intended to be supplemental to the work already accomplished for the Plan.

Determine the Transportation Needs

Statewide, regional and local transportation needs will be evaluated. Local needs include:

(1) McMinnville airport operations and road connections to the airport
(2) A McMinnville beltline connection
(3) Intermodal connectivity and facility development
(4) Special transportation needs
(5) Safety needs
(6) Needs created by existing and proposed development, including the Oregon AirVenture Museum and the McMinnville Hospital
(7) All transportation needs included in the Plan

The needs are to be projected to the year 2016, unless a longer planning period is established by the steering committee.

Conversion and Analysis of McMinnville Transportation Model

The existing computerized model for McMinnville will need to be converted into a stand-alone EMME/2 model. The converted model will be analyzed to determine if additional work is necessary for it to adequately characterize the effect of anticipated development in the refinement area, the conversion of land use to other more intensive uses, and the transportation needs identified. Revisions to the model will be made as necessary to accommodate the refinement area development consistent with the Study's goals and objectives.

Systems Refinement Planning Within the Refinement Area

All significant anticipated land uses in the refinement area are to be included in development of a transportation refinement plan. The results of the planning will:

(1) Establish what type of transportation facilities will be needed to serve development (arterial, collector, local streets, intercity bus facilities, etc.). Major road and intermodal connections within the refinement area, and the role of local transit and intercity bus services shall be considered.
(2) Identify and evaluate alternative locations within the refinement area for a future interchange, including land use and environmental impacts, funding possibilities, cost to the public, and associated user costs (NOTE: the alternative selected must be consistent with the provisions of the TPR and ISTEA).
(3) Evaluate whether alterations to the East McMinnville Interchange should occur.
(4) Identify future roadway connections between the East McMinnville. Interchange, the future interchange, and all property within the refinement area.
(5) Identify alternative locations for future roads providing a land access function.
(6) Identify alternative solutions to transportation needs, including TDM and TSM, and modal shift potential.
(7) Evaluate associated system benefits and costs, including impacts on vehicle miles, public safety, and system performance (LOS).

Planning efforts will be aimed at a design year of 2016, including build-out of the urban growth boundary and likely conversion of rural land within the refinement area.

Improvement needs at five-year intervals and in conjunction with development proposals will be identified.

The Study's developed goals, objectives, and policies will be reviewed and revised, if necessary. The Plan will be modified as needed to provide for facility operations consistent with the Study's LOS standards, and to accommodate system refinement planning issues, including TDM and TSM. If an interchange is determined to be necessary, sufficient design will be provided to identify its approximate location as well as future arterial and collector roads within the refinement area.

Develop Implementation Mechanisms for the Study

Implementation techniques to be developed will include:

(1) Interim transportation facility management ordinances
(2) Progressive development of a land access road system that is consistent with the developed plan and results in the interchange and area street system
(3) Identification of facility improvement phasing based upon five-year increments throughout the planning period
(4) Identification of funding mechanisms for road construction; development of a financing program to accomplish the Study
(5) A means to allow conversion of land use in conjunction with the development of the transportation facilities
(6) An access management plan for the refinement area, including access spacing for streets and driveways connecting to the local area streets

Oregon Department of Transportation

Region 2

Appendix D: Study Memorandums

INTEROFFICE MEMO

August 10, 1995

TO: John Detar
Corridor Planning Project Manager

FROM: Bernie Kleutsch
Bernie Kleutsch
Engineering Geologist

986-2600
File Code:

SUBJECT: **Proposed Cruickshank Road Underpass**
Salmon River Highway, McMinnville
Yamhill County, C037-5102-007

These are my comments on the feasibility of a proposed underpass at Cruickshank Road. The design scheme I considered is a simple excavation to bring Cruickshank Road about 25 feet below its existing grade at the intersection with the Salmon River Highway.

My main concern at this point is the groundwater and soil conditions at the site. For this level of investigation, I researched groundwater reports and water wells logs for the area; and made a site visit to observe topographic features, land use, and local road designs. The slope gradient also was measured from the subject intersection to a possible drainage area about 2,000 feet to the east.

GROUNDWATER

Two types of groundwater are important to consider for this project. The first one is the regional 'static' water level, which is the level normally measured in wells. The second type is the intermittent, perched groundwater we observe at the beginning of the wet season of the year and in the summer from irrigation of farmlands. Both types are important to account for in drainage and erosion control plans.

A literature search yielded the following information. The seasonal low regional groundwater elevation in the project area is about 30 feet below the ground surface[1]. The seasonal low elevation is measured in the fall when groundwater is at its lowest level. Fluctuations in groundwater during the wetter times of the year can be 10 - 15 feet higher than the seasonal low levels[1] . Therefore, the

[1] *Ground Water in the Eola-Amity Hills Area Northern Willamette Valley, Oregon,* (Geological Survey Water-Supply Paper 1847, Plate 1, 1967)

anticipated high groundwater elevations may be only 15 to 20 feet below ground. If this is true, then an excavation of 25 feet will likely encounter groundwater during part of the year.

Local water well logs support this information, however none are very close to the actual excavation site. If this project proceeds to the design phase, I recommend a monitoring well be established at the exact project site and used to record water levels throughout the year.

The intermittent, perched groundwater condition is much harder to evaluate during a study such as this. However, some assumptions can be made. It is reasonable to assume that this site receives periodic and seasonal rainfall events and, given the nature of the soils, water will be slow to infiltrate causing surficial saturation and runoff on steeper slopes such as road cuts. This will cause erosion problems in the cuts and add an additional source of water to be mitigated by the overall drainage design.

SOILS

The soils encountered within the depth of interest for this study are identified on well logs as silt and clay. Geologic mapping indicates the silt and clay is part of the Willamette Silt[2] geologic unit found throughout the Willamette Valley. The silt and clay have low permeability, so they transmit groundwater slowly.

The existing roadway ditches do not show evidence of significant erosion problems with this soil, however their gradients are also very flat. If steep ditch gradients are designed, some erosion protection would likely be needed. Subgrade soil problems due to high static groundwater should be expected unless drainage designs are included in the project to correct the problem. Typical highway cut slopes for fine-grained soils should be suitable if properly graded and vegetated.

GRADIENTS

The elevations were checked by staff of the Region Geology office from the subject intersection to a drainage culvert about 2,000 feet to the east. The difference in elevation between the Salmon River Highway pavement at Cruickshank Road, and the flow line at the drainage culvert was 38 feet. This difference may be enough for a designer to create a drainage plan for the proposed excavation. However, the drainage plan may also require raising of the Salmon River Highway grade by a few feet. Also, it would be a significant excavation in itself to dig a deep trench 2,000 feet to the drainage culvert.

CONCLUSIONS

The proposed excavation at Cruickshank Road appears feasible. Prior to actual design, a monitoring well should be established at the site to measure seasonal water levels. A special drainage design will likely be needed because of high seasonal groundwater conditions. This design might include a trench and drainage culvert to an outlet location about 2,000 feet to the east. Typical cut slope designs for fine-grained soils should be suitable with proper erosion control.

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[2] *Preliminary Geologic Map of the McMinnville and Dayton Quadrangles, Oregon,* (Oregon Departmant of Geology and Mineral Industries Open File Report 0-81-6, 1981)

Highway 18 McMinnville Refinement Plan
Preliminary Summary of Environmental Issues

Land use and socioeconomic impacts are the principal environmental issues related to the Highway 18 McMinnville Refinement Plan. In addition to these major issues there are many other environmental issues which will have to be investigated and are further detailed in this analysis. No environmental issues have been identified which would require terminating the project or prevent a successful outcome. Potential environmental impacts are large enough that development of either alternative will most likely be classified as a Class 1 project requiring a Draft Environmental Impact Statement (DEIS) and a Final Environmental Impact Statement (FEIS).

Two principal alternatives are currently under consideration for the McMinnville Corridor Refinement Plan. These are the Existing Highway Alternative and the Bypass Alternative. The Existing Highway Alternative involves upgrading the current condition of Highway 18 through the construction of an additional interchange, reconstruction of an existing one, and the addition of a public road network that will eliminate many of the direct accesses to Highway 18. The Alternative Bypass option involves construction of a new highway bypassing the existing route of Highway 18 between the South Yamhill River and the McMinnville Airport.

Land Use Issues

The Existing Highway Alternative has less adverse impacts to land use because it will force development into the existing urbanized areas and will tend to slow urban sprawl. Constructing a new bypass of the existing bypass highway will carve out essentially a new highway on high value farmland. Efforts to reduce adverse land use impacts through access control to the new highway (Alternative Bypass) may fail with time as future development pressure grows. The Bypass Alternative may be in conflict with the Transportation Planning Rule.

Socioeconomic Impacts

Both alternatives appear to affect approximately the same number of businesses and residential properties. The Existing Highway Alternative will have less socioeconomic impacts to businesses because this alternative will keep traffic in the same areas that it is in today. The Bypass alternative will direct traffic away from existing businesses.

Biology

No substantial biological impacts are foreseen with either alternative. A check of the Oregon Natural Heritage Data Base lists two federally listed candidate species present in the general area. These are the Thin Leafed Peavine (*Lalhyrus holchlorus*) and the Oregon Giant Earthworm (*Megascolides macelfresh*). Neither of these species represent a problem to the development of the project. There may be some relatively minor biology issues with building a new bridge across the South Yamhill River which will be required with the Alternative Bypass.

Hazardous Materials

An abandoned gas station/automotive repair shop is present northeast of the East McMinnville Interchange and north of the frontage road. Right-of-Way required for the Existing Highway Alternative would involve a HazMat Level One investigation of this property. A level one analysis would define the nature and scope of potential hazardous material concerns and outline further investigative work required. No known hazardous materials impacts are present on the Bypass Alternative.

Historic Resources

A number of old farm houses are present in the corridor and it is likely that some of these will be impacted by either alternative. Any impacted old farm house will have to be researched to determine if significant historic resources are present. If they are, potential impacts are 4(f) issues.

Noise Impacts

Both alternatives will change traffic patterns. This may cause increased noise levels to residential properties. The Bypass Alternative probably has less noise impacts than the Existing Roadway Alternative because it will direct traffic into undeveloped areas. All impacted residences will have to be identified, impacts assessed, and mitigation (sound walls) provided if appropriate.

4(F) issues

Airport Park is close enough to the Existing Highway Alternative that it may be impacted by a frontage road. Should right-of-way be required from this park, a

4(f) document will be required. The use of Airport Park may also be impacted by increased noise levels or other indirect effects requiring a 4(f) document. A 4(f) document will also be required if any old farm houses in the project area are determined to be historic and are impacted by either alternative.

Water Quality

No major water quality issues are anticipated with either alternative. The South Yamhill River is designated by the DEQ as a water quality limited stream. Any construction activities near the river may require special construction provisions.

Wetlands

Wetland impacts will have to be determined for either alternative. The Alternative Bypass appears to have greater impacts to wetlands than the Existing Road Alternative because it traverses the lowland floodplain area adjacent to the Yamhill River. The law requires that wetlands must first be avoided. If they can not be avoided, impacts must be minimized and mitigated.

Floodplain issues

The Existing Roadway option stays out of the 100 year floodplain and the floodway. The Alternative Bypass crosses the 100 year floodplain and the floodway associated with the Yamhill River. Consideration will have to be given to impacts of the bypass alternative to flood storage and the floodway. However, simple floodplain/floodway crossings are seldom a difficult problem.

Glen Kirkpatrick
Region Two Environmentalist
9/95

STATE OF OREGON
Right of Way
Phone:(503) 378-2644

INTEROFFICE MEMO

DATE: October 6, 1995

TO: John DeTar
Region 2 Planner

FROM: Tom Martin
Region Liaison Agent

SUBJECT: Three Mile Lane Corridor
Right of Way Estimate

John, I have attached an estimate of the right of way costs for the acquisition of the various phases of the proposed corridor. I have used recent sales of properties comparable to the subject properties apparently affected by the proposed alignments. There may some slight duplications of costs within different phases; however, the exaggerations are not tremendous. A more specific breakdown can be made a later date. The parsonnel costs are based on the number of files per phase. The number of files was determined by comparing the maps provided by Dave Warrick of Preliminary Design to assessor plats. I don't believe the plats I have are current so there may be some error in that calculation. I used 15% for legal/contingencies which could be a little low.

If you desire more in-depth research, please advise. Feel free to contact me for additional clarification or information. I understand you will distribute copies of this estimate as needed.

Three Mile Lane Corridor
Estimated Right-of-Way Costs

PHASE	RIGHT-OF-WAY	PERSONNEL	CONTINGENCIES
1A	102,000	22,400	19,900
1B	123,000	12,800	20,400
1C	352,500	27,000	56,900
1D	96,000	12,000	16,200
2D	25,200	7,500	4,900
2E	236,000	3,200	35,900
2I	186,000	3,000	28,400
Subtotal	1,120,700	87,900	182,600
2A	120,200	3,200	18,500
2B	275,000	9,000	42,600
2C	201,000	18,000	32,900
2F	96,000	9,000	18,500
2G	214,000	12,800	34,000
2H	217,000	3,200	33,000
2J	43,800	22,000	9,900
*Subtotal	1,167,000	77,200	189,400
3A	810,200	22,500	12,500
3B	112,200	6,500	17,800
3C	134,000	7,500	21,200
3D	56,800	7,500	9,600
3E	16,800	6,000	3,300
Subtotal	1,130,000	50,000	64,400
Total	3,417,700	215,100	436,400

TOTAL COSTS = 4,069,200 ≈ 4,100,000

* Note: Right-of-way for the interchange is included in the first grouping.

Rough Estimate Of Utility Impacts (In $1,000s)
THREE MILE LANE REFINEMENT STUDY
Salmon River Highway

Phase 1	Power	TV	Tele.	Water	Sanitary Sewer	Gas	Total	Non-reimb	Reimbuse.
Construct signalized intersection at location of future N-S Rd. intersection	8	2	20	10	2	7	49	37	12
Consolidate Evergreen and Cirrus Dr. access to Armory Way	10			4			14	4	10
Adjust southerly leg of Norton Lane intersection to accommodate projected traffic needs									
Build new connection to southerly frontage road system from east Mac interchange									
Adjust southerly frontage roads between Lawson and Norton (to maintain access)				3			3		3
If storm sewer				33		50	83	50	33
Build northerly frontage road between Kingwood and the new N-S arterial road	70	3		4	6		83	83	
Total Phase 1	88	5	20	54	8	57	232	174	58
Phase 2									
Build frontage road from Loop Rd. to the new N-S arterial	175	10	1,000	10	14		1,209	1,209	
Build frontage road from Cruikshank Rd. to Cirrus Dr.	10	3					13	13	
Build frontage road from Armory Way to the new N-S arterial				30			30		30
Build interchange to replace signal at Hwy. 18/N-S arterial intersection			2,000	30	35	50	2,115	50	2,065
Close Norton Lane/Hwy. 18 intersection and complete the northerly frontage road to Atlantic St. area	135	20					155	155	
If storm sewers			100	50	50	65	265	65	200
Close the Armory Way intersection									
Signalize intersection of Hwy. 18 Spur and Pacific St.	20	3					23	23	
Total Phase 2	340	36	3,100	120	99	115	3,810	1,515	2,295
Phase 3									
Rebuild east Mac interchange			250			100	350	350	
Construct frontage roads needed to continue access in the immediate interchange area									
Total Phase 3			250			100	350	350	

Appendix E: Steering Committee Minutes

McMINNVILLE CORRIDOR
REFINEMENT STUDY

STEERING COMMITTEE
December 8, 1994
1:00 - 3:00 p.m.
Municipal Building Courtroom
230 East Second Street
McMinnville, Oregon

ATTENDANCE

Martin Chroust-Masin, Yamhill County Planning
John deTar, ODOT Region 2
Dan Fricke, ODOT Region 2/Dst. 3
Rick Highsmith, City of McMinnville
Robert Hood, News-Register
Don Jordan, ODOT Region 2/Dst. 3
Doug Montgomery, City of McMinnville
Commissioner Debi Owens, Yamhill County
Councilor Robert Payne, McMinnville City Council

MWVCOG Staff

Richard Schmid, Chief Planner
Wayne Rickert, Senior Planner
Sean Loughran, Associate Planner
Martha Kohley, Staff Assistant

The first meeting of the Steering Committee for the McMinville Corridor Refinement Study was called to order at 1:10 p.m. by Richard Schmid. Richard announced that he would be running the meeting and began by asking everyone to introduce themselves.

Following introductions, Richard explained that the Oregon Department of Transportation (ODOT) asked the Mid-Willamette Valley Council of Governments (COG) to put together an interagency process and study that all participants would be happy with. The findings and strategies developed during this study will be incorporated, as appropriate, into the City and County comprehensive plans. A consensus-based approach will be used; therefore, all parties will need to be in total agreement on the products that result from the study. Everyone was encouraged to feel free to discuss issues or make comments.

Wayne Rickert provided an overview of the products and scope of work. The overall purpose of the Study is to: 1) determine, through the year 2016, the best method to improve the corridor for the movement of people, goods and services using a variety of modes, and 2) how best to manage the corridor to balance its interaction with non-transportation issues.

The Study must meet the requirements of the Transportation Planning Rule, insure increased livability and decreased congestion, insure savings and efficiencies by identifying projects and right of way needs, and provide economic links and efficient movement.

There are three phases to corridor planning: 1) strategy; 2) development of a general plan; and 3) a system plan. A strategy develops transportation improvement and management objectives for the corridor. A general plan looks at the entire corridor and determines basic improvements that need to be made. It is a broad overview of the corridor. A system plan is more detailed and applies to areas in and around larger cities.

Wayne explained that the Study will have a little of each type combined into a detailed refinement study. The City of McMinnville has already completed a lot of work. Their work will be reviewed to see how it fits into the work being done by ODOT.

The Committee was shown a five-minute video which provided an aerial view of the 4.3 mile portion of Highway 18 being studied.

Wayne asked the Committee to review the Scope of Work on page 2 of the Information Packet. The Study covers a 22-year time period (2016). The Committee was asked to confirm that the identified study area and focus of the study included all areas of concern. The Committee agreed that the primary concern is the Three-Mile Lane area. The Committee agreed that the easterly end of the study be shifted west in order to avoid Lafayette Highway. The Committee asked that the Lafayette Highway intersection be studied in conjunction with areas further to the east.

Goals and objectives were reviewed. According to the Oregon Transportation Plan, the Corridor should operate at the Level of Service (LOS) "C" or better. In addition, a Category 2 access may be appropriate. This will have to be determined. These will have a significant impact on how the corridor is managed.

Public involvement will be sought through a series of informational workshops. Staff felt that public workshops are the best method to gather the community's issues and concerns. The Steering Committee was asked inform staff of specific groups that should be added to the workshop mailing list. The first workshop will identify community transportation issues, concerns, goals and objectives. The second and third public workshops will deal with preparation and evaluation of

alternatives. This information will be presented to the Steering Committee before being presented to the public. The fourth public workshop will deal with the presentation of the final Study document.

Commissioner Debi Owens arrived at 1:31 p.m.

The Committee agreed that four open houses would assist in gathering information and comments. They also suggested the use of fliers and newsletters. Committee members agreed to forward information on to the city and county transportation advisory committees.

The first public workshop is scheduled for January 9th and will be held at the National Guard Armory building. Staff suggested that the Steering Committee plan to attend.

Staff explained that constraints on facility development deal with bordering land uses, comprehensive and zoning plan designations, environmental, social, economic and energy constraints. Staff stressed the importance of identifying problem areas early on.

Existing plans, policies, and standards will be reviewed and future land use scenarios will be developed.

An inventory of existing systems and facilities will be beneficial to see if there is any updated information that would be pertinent to the Study.

Each jurisdiction will have certain transportation needs that will need to be met by the corridor. These needs will have to be determined and they can best be accommodated.

McMinnville's transportation model (T Model 2) will be converted to the ODOT's modelling software (EMME 2) to allow transportation scenarios to be run. The status of this conversion will be provided at a later date.

System refinement planning will be an extensive part of the Study in which the Steering Committee will need to make some detailed recommendations.

After determining what is needed, implementation mechanisms will have to be developed. Funding sources will also have to be identified.

Richard Schmid reviewed the Cooperative Agreement with the Committee. It was COG's intention to make the Agreement as simple and understandable as possible. It stated what each party could expect to receive from the Study, what each party will be expected to provide and that all parties will agree to cooperate. Richard stated that the agreement was being provided at that time to allow everyone an opportunity for review and make proposed changes.

Richard asked if there were any questions or concerns regarding the Agreement. Since there were none, the Steering Committee was asked to forward the Agreement to their individual jurisdictions for approval.

The Committee adjourned for a break at 2:00 p.m. and reconvened at 2:15 p.m.

Wayne Rickert and Sean Loughran led the Committee through information related to "Background/Status". The discussion included findings of information gathered by reviewing many existing plans. Data compiled through traffic counts included average daily traffic (ADT), progression, and accident locations. The numbers show an annual increase. Some counts were affected by the traffic relocation during construction. Population estimates (prepared by PSU in September 1994) and historical growth rates for the City of McMinnville illustrated a 30% per decade increase that staff felt was reliable enough to be used to check the planning factor in the McMinnville Transportation Master Plan. Charts shown on pages 16 and 17 of the Information Packet showed commuting patterns into and away from McMinnville. This information was obtained from 1990 Census data.

Staff asked the Committee if they felt more aggressive growth should be considered for the corridor.

Mr. Highsmith stated it was probably O.K., but he had some concerns with PSU's projections, which appeared to be low. Growth might occur sooner than predicted.

Sean Loughran provided information on zoning and land use in the Study area. Land use analysis considers potential land use changes in the corridor and how those changes could impact the facility. Adjacent property functions also have to be studied. Most of the land surrounding the facility is zoned for agricultural or industrial uses. The amount of existing farmland will limit development.

Sean referred to the map on page 19 of the Information Packet. The map illustrated how zoning in the area might appear at buildout. Staff stated that they are aware that the City of McMinnville would like to encourage aviation-related businesses and that they discouraged commercial strip development in the Study area.

Mr. Highsmith said he would share information with COG staff regarding plans for a museum in the area that allows for access from an intersection.

Mr. deTar suggested inviting the Department of Land Conservation and Development (DLCD) to a future meeting.

Wayne Rickert explained that the map on page 20 showed major property owners in the Study area. They will be added to the open house mailing list.

Mr. Highsmith felt it would be beneficial to make individual contact with each of the major property owners along the corridor.

The Committee discussed other groups and businesses that should be included in the study effort and added to the mailing list.

The Committee agreed that people would respond to advertisements and mailers announcing the public open house. COG staff will obtain copies of fliers and newsletters used previously by the City of McMinnville and Yamhill County.

Other issues identified were safety, through traffic, farm and other accesses, other modes of transportation and frontage roads.

Mr. Highsmith stated that currently the highway functions well and has potential for increased capacity. The biggest problem will be getting through the transition period and interim solutions are needed soon.

Staff stated that these problems can be discussed after alternative solution designs are obtained from CH2M Hill and Kittleson. Many things will be worked out as the study process progresses.

It was agreed that the next Steering Committee meeting would be held on January 19th at the same time and location.

There being no further business, the meeting adjourned at 3:10 p.m.

MINUTES

MCMINNVILLE CORRIDOR REFINEMENT STUDY
January 19, 1995
1:00 p.m.
Municipal Building Courtroom
230 East Second Street, McMinnville, Oregon

ATTENDANCE: Councilor Robert Payne, Bill Gille, Commissioner Dennis Goecks, John deTar, Dan Fricke, Don Jordan, Martin Chroust-Masin, Doug Montgomery, Robert Hood, Richard Hays, Wayne Rickert, Sean Loughran, Martha Kohley.

CALL TO ORDER: The meeting was called to order at 1:07 p.m. Everyone was asked to introduce themselves. Attendance was noted as listed above.

1. SUMMARY OF OPENHOUSE

Wayne Rickert thanked City, County and ODOT staff for their assistance with the Public Open House held on January 9th at the Armory. The Open House was well attended and many comments received. Wayne provided a summary of the comments to the committee. Committee members briefly discussed some of the issues raised.

Commissioner Goecks stated that farmers in the area still want to be able to access their land. There is a need to put a plan in place quickly to prevent the installation of multiple stoplights which would inhibit the flow of traffic. He emphasized that the facility was built as a bypass. He stated that multiple transportation studies are being conducted by a mix of jurisdictions and asked if there is a mechanism in place to insure that studies and projects do not work against each other. Staff emphasized that there has purposely been an overlap of staff and consultants working on the various studies for the purpose of insuring consistency as well as cost effectiveness.

2. LAND USE

Sean Loughran briefed the committee on the land use scenarios proposed as a basis for transportation facility alternatives. DLCD representatives had voiced their desire for one of the scenarios to depict what will happen to traffic if the City of McMinnville maintains its current Urban Growth Boundary (UGB). One land use proposal illustrated this scenario while another is based on an expanded UGB. Sean explained the assumptions and rational for the projected, long-range changes to current land uses. For example, staff found that Olde Stone Village is hoping to

expand its operation into a small, adjoining parcel zoned for light industrial use. Another example is using input that a large area along Norton is being considered for development as residential property. Both scenarios therefore show the land as being used for multi-family residential.

Sean stated that Rick Highsmith, McMinnville Planning Director, feels that the City of McMinnville's existing need for commercial land will provide enough justification for expanding the UGB the next time the City's Comprehensive Plan is updated.

The Committee discussed the land use scenario in detail, included changes to projected land uses. Major points of consensus were:

1. Study two future land use options. The first option would focus on build-out under the existing comprehensive plan designations. The second option would use an UBG expanded to the natural flood plain barrier to the south and including Evergreen property to the north. This was viewed as the most realistic option. Even if the UGB is not expanded during this 20-year planning cycle, the Committee felt that transportation alternatives which lent themselves to phasing would form a master plan in the future.

2. A strong commitment for the road to remain as a highway for speedy travel. Avoid situations leading to congestion and delays. Limitedaccess may be necessary. Make good efforts to continue access to adjacent property is desired.

3. The McMinnville City Council needs to concur in the land use scenario since the scenario anticipates a major change in future land use designations (industrial/commercial) in the Evergreen property, north of the airfield. Their concurrence will alleviate the Committee's speculation and allow a cost effective solution. Staff will forward a letter to Councilor Bob Payne which will address the issues associated with the proposed land use designation changes. Mr. Payne will query the City Council.

4. It is important to develop a plan now so necessary right-of-way can be obtained while land values are still relatively low.

Following the Committee's decision on land use scenarios, there was a brief discussion on potential transportation alternatives. The consultant, Kittleson and Associates, will be asked to model two transportation alternatives to enable the Committee and staff to study their impacts.

3. MODEL DEVELOPMENT

Wayne Rickert provided an update on the status of converting the McMinnville traffic model from its present form to the State standard. He also discussed the coordination of calibration timelines between the technical staff and the consultant.

There being no further business, the meeting adjourned at 3:07 p.m.

MINUTES

MCMINNVILLE CORRIDOR REFINEMENT STUDY
July 13, 1995
1:00 p.m.
Municipal Building Courtroom
230 East Second Street, McMinnville, Oregon

1. ATTENDANCE

Steering Committee:

John deTar, ODOT Region 2
Commissioner Dennis Goecks, Yamhill County
Rick Highsmith, McMinnville Planning Department
Don Jordan, ODOT - District 3
Councilor Robert Payne, McMinnville City Council

Others:

Martin Chroust-Masin, Yamhill County Planning Department
Ken Early, YCAP
Dan Fricke, ODOT Region 2, District 3
Martha Kohley, MWVCOG
Hisham Noeimi, J.R.H. Transportation Engineering
Kim Poore, Mgr., Old Stone Village
Tim Poore, Mrg., Old Stone Village
Wayne Rickert, MWVCOG
Richard Schmid, MWVCOG
Mike Unger, MWVCOG

2. CALL TO ORDER

The meeting was called to order at 1:05 p.m. Everyone was asked to introduce themselves. Attendance was noted as listed above.

3. OPEN HOUSE RESULTS

Wayne Rickert reported that the information received from the June 19th Open House questionnaires and personal discussions with participants provided valuable information for further development of the road system. Most participants favored the frontage road option with the remainder almost equally divided between the alternate bypass or no changes at all. Some good suggestions were received for modifying the system.

Commissioner Goecks commented that, in many cases, a open house will attract people that are directly affected by the particular issue. You have to take into consideration the source of the information you have received. You also need to determine what purpose you wanted the survey to serve.

Wayne stated that the survey provided staff with a good idea on how the public perceives the project and it gave the public the opportunity to provide specific comments and share their ideas. The comments introduced items that had not been considered by staff and needed investigation or further discussion.

4. FINALIZE TRANSPORTATION ALTERNATIVES

Wayne Rickert explained that at the last Steering Committee meeting there was strong consensus that the frontage road alternative was best, but we should present both alternatives to the public at an open house for feedback. Since that time, staff has found further information on the alternatives. For instance, the Cruickshank curve as shown on the conceptual plan is not outside the airport runway safety zone. It would need to be moved approximately 100 feet northeast to avoid problems. The frontage would be close to the fuel storage site.

These types of issues may require another meeting of the TAC to resolve these problems if possible. However, staff would like the Steering Committee to determine which alternative they would like staff to pursue.

Rick Highsmith reported that John deTar,Wayne Rickert, Bill Gille and he met with Evergreen International representatives on July 12th. They were not in favor of the southern frontage road alternative. Mr. Del Smith recognized that to fully use his property, improvements will have to be made to the system. He would like to keep the options open. The overall feeling was that even though Evergreen representatives were not pleased at the options presented at the June 19 Open House, they want to be cooperative and coordinate with staff on the project. Rick indicated that the Evergreen area will have to receive close study and consideration during the refinement stage of the plan. Commissioner Goecks agreed.

Wayne Rickert reminded the committee that the study is an overall, long-range plan, not a project level plan. Therefore, specific suggestions or concerns can be addressed once the study reaches the project level planning phase. Wayne sited a frontage road and a north/south arterial as examples of those of those types of issues. He added that one risk associated with this approach is that it does not allow for setting land aside.

Commissioner Goecks stated that the committee needed to move ahead. Motion was made by Commissioner Goecks and seconded by Rick Highsmith to accept the frontage road concept with the understanding that there will be details to be worked out in the future.

The floor was opened for discussion.

Richard Schmid stated that focus is not solely on the concept, but what the ultimate goal is for the plan. He perceived the goal to be the development of a plan that the county, city and state can adopt. Most of the concerns have been identified on the east end of the study area. He felt that those concerns could be resolved by the TAC meeting and staff following up with the recommendations made by the TAC.

John deTar stated that staff will need to move forward with an identification of environmental impacts and schedule time for analysis of those impacts. It would be important to include someone with the knowledge of federal NEPA requirements and the ability to identify issues and project level problems, such as, neighborhood impacts, sound walls, archeological sites, etc. He could not recall any issues being identified in the past as potential problems.

The committee agreed that the aesthetics of the design should be a strong consideration and this could also be discussed at the TAC meeting.

Commissioner Goecks stressed the importance of allowing the property owners a controlling interest in how quickly the plan will be implemented. The property owners must realize that the plan will allows flexibility and will take their personal plans into consideration.

Rick Highsmith added that it will eventually benefit major property owners to have a plan in place.

Richard Schmid reminded the committee that the cost estimates did not include the purchase of right-of-way. The estimates provided at the last Steering Committee meeting were only for construction costs. Roughly, an additional $4 million should be added for right-of-way. Wayne Rickert stated that approximately the same amount of right-of-way is necessary for both options, so estimates provide relative costs.

Richard added that even if major land owners do not have plans to develop in the near future, when they do develop there will be a plan and, therefore, no surprises. Currently, there are not many options for further development of a road system. If there is further delay, the situation will only get worse. He stated that while writing a plan of alternatives staff has identified the pros and cons for each alternative. Richard invited the committee to add to the rationale for selecting the frontage road concept.

The discussion concluded. Those voting in favor of the motion were: John deTar, Commissioner Dennis Goecks, Rick Highsmith, Don Jordan, and Councilor Robert Payne. The motion carried unanimously.

Commissioner Goecks encouraged staff to move ahead with the study and strive to create as little disruption as possible. The bypass alternative expanded the area to be impacted, which could broaden the possibility of encountering environmental impacts.

Wayne Rickert asked the members of the TAC to remain after the meeting to schedule a meeting.

John deTar asked if everyone was satisfied with what had been done regarding park and ride issues. Two potential locations have been identified for the study area.

Wayne Rickert stated that the park and ride locations are a good use of land that otherwise would not be used. They would serve commuters more than local users.

Committee members verified that neither the city or county have done much planning for Transportation Demand Management (TDM). Richard Schmid stated that as the county and city define their own TDM strategies, they might want to include the park and ride lots in their land uses. He asked if there were any comments regarding potential pedestrian over-crossings.

Wayne Rickert reported that open house comments did not reflect either a like or dislike for them, although one individual was surprised that a pedestrian over-crossing would require a lot of room.

5. DISCUSSION OF IMPLEMENTATION PROCESS/PROCEDURES/ACTIONS AND TIMING

Wayne Rickert began the discussion by asking the committee how the project would be funded. Staff felt the general concept was that the frontage roads would be the city's responsibility and Highway 18 and its intersections would be the state's responsibility. He asked for comments and other thoughts.

Don Jordan stated that the funds are limited and the state will be looking at the city and the county for joint ventures to implement the project.

Richard Schmid agreed that there will have to be a cooperative effort and explained that there is a difference between paying for a facility and accepting responsibility for it after it is built. The frontage roads will be the city's responsibility and will be built as land is developed. The highway will be the state's ownership and responsibility. The interchanges and a certain amount of land around them will also belong to the state. Staff requested that the committee concede to agreement or disagreement of this arrangement.

Reference was made by Commissioner Goecks to Item B.1., listed under Item I., Responsibilities, in the discussion paper on Implementation included in the agenda packet. Commissioner Goecks felt strongly that frontage roads should become city responsibility. He suggested that there be an agreement between the city and the county which would state that once a specific area becomes part of the city, the city would take responsibility for it thereafter.

Rick Highsmith agreed with Commissioner Goecks.

Following a brief discussion on urban growth boundary expansion and urban reserve, the committee recessed for a 10-minute break.

The meeting reconvened at 2: 08 p.m. Richard Schmid began the discussion by emphasizing the importance of establishing a plan and develop a method to reserve the land needed to follow through with the plan. He suggested the possibility of forming an urban renewal district. The development of an urban renewal plan would focus on improvements. A portion of the money from urban renewal could be used to leverage interchanges by providing funds for local match which would encourage the state to participate. This method provides flexibility and does not cost the property owners any more than normal. The use of system development charges or local improvement districts could also be considered. A combination of system development charges and an urban renewal district could be used to fund improvements.

Don Jordan explained that ODOT looks closely at the amount of local contribution, the existence of an implementation plan, as well as, provisions for maintenance of a facility once it is built.

John deTar stated that there is no doubt that the city will have to pay for a lot of the project.

Rick Highsmith stated that he believes that the city will agree to finance portions of the facility, but will not use general funds to do so. He added that he did not think that the City of McMinnville would be supportive of an urban renewal district. He felt funding through developer costs would be more likely. He did not think that the McMinnville City Council would support bonds, taxes or urban renewal.

Councilor Payne stated that he did not think the city would support a bond measure anytime in the near future or approve the use of general funds for this project. He said he wasn't able to comment on an urban renewal district.

Rick Highsmith stated that the main problem is that the public does not think that the facility is necessary. The problem does not look bad enough for the taxpayers to be supportive.

Richard Schmid commented that funding is totally a local decision.

Rick Highsmith explained that once the jurisdictional issues are resolved, the city will decide how the financing will be done. Due to the large parcel size, he did not think there will be a piecemeal or connectivity problem with development. Most of the vacant land consists of large parcels owned by very few individuals. There are not many small parcels. He anticipates that the facility will be funded by its developers.

The committee discussed a south frontage road. In response to a question on whether the south frontage road would define the UGB, Rick Highsmith explained the UGB will be delineated by flood plains.

The committee discussed urban renewal districts and how they work. Mike Unger reiterated that urban renewal districts provide flexibility and financing alternatives.

Richard Schmid discussed Item 3., Timing of Actions. The plan will have time frames for the implementation of different phases. He asked If traffic volumes increased to a certain point at a critical intersection before funding would be available for the next phase, how did the committee think this should be dealt with.

Rick Highsmith stated he would like to have time frames taken out of the plan and phased implementation be based on traffic volumes.

Wayne Rickert explained that time frames are necessary to coordinate state actions with the State Transportation Improvement Plan (STIP). The STIP is based on time frames to build specific projects.

Commissioner Goecks suggested that the committee begin Phase I to ensure that it is done before it is too late. Staff reviewed Phase I with the committee and confirmed that it would be necessary for Phase I to be included in the STIP.

Following further discussion, Commissioner Goecks suggested redefining the phases, especially Phase I. John deTar recommended consideration of an intergovernmental agreement with ODOT, relying on phases in the plan being implementation before allowing additional accesses.

Rick Highsmith stated that an intergovernmental agreement sounded like a good option but it would have to be thoroughly investigated. It might allow the city more clout to complete dedications, etc.

Commissioner Goecks stated that he wasn't sure about that kind of approach, but it might be the only option. Everyone will have the look for ways to actively work through this problem.

6. NEXT STEPS

Wayne Rickert said that staff will continue to work on the draft plan and meet with the TAC to finalize several issues. Information will be forwarded to the Steering Committee for consideration. Wayne confirmed that the committee was scheduled to meet again on August 17 the review the draft plan. The TAC will meet prior to that date.

Discussion followed regarding the best process to review the draft plan and conduct a public hearing. Commissioner Goecks suggested that the Steering Committee conduct a public hearing to solicit public input. Following that meeting, conduct a joint public hearing with both the Yamhill County Board of Commissioners and the McMinnville City Council to adopt the plan. The committee favored Commissioner Goeck's suggested process. Staff will continue to keep Evergreen representatives informed of the process.

Richard Schmid pointed out that August 17 might be too soon to conduct a combined meeting. September might be a better time to obtain better attendance.

7. ADJOURNMENT

There being no further business, the meeting adjourned at 3:14 p.m.

Appendix F: Summary of Public Open Houses and Public Comment

Summary of Public Open House #1

Attendance

- Forty-nine in attendance; does not including steering committee.
- Estimate two-thirds arrived between 3:15 p.m. and 3:40 p.m.

Survey Results

Twenty-eight surveys were completed. (Includes five from flyers.)

Questions and Results (Note: Some questions could have more than one answer.)

1. How did you find out about the open house?
   a. Received flyer in mail 13
   b. News Advertisement 6
   c. Other 5
   d. News Article 3

2. Was the time convenient for you?
   a. Yes 20
   b. No 2
   c. Better Time is 0

3. Typical Use of the Corridor
   a. To visit/shop/work at places within the study area 13
   b. To reach destinations outside the study area 12
   c. Other (live/own property on the corridor) 9

4. What service do you want the road to provide?
   a. Primarily to outside the study area (through) 14
   b. Primarily access lands adjacent to area 8
   c. Both (not an option, but selected anyway) 5

Comments

- There are no provisions in <u>this</u> Transportation Study for passenger train service on existing rail lines.
  We own farm land in the study area and cannot afford to lose any to further road expansion.
  We already have a problem with litter and crime along Loop Road because it is gravel and unsupervised. Can the county and city provide service to the road if area use increases? Pavement, Sheriff, etc.

- I don't want to see more land taken up for road use.

- 18 & Lafayette should have stop lights too many accidents.
  If 4 lane we need frontage.

- Lafayette - 18 intersection needs attention very badly.

NOTE: The following comments were from the survey portion of the flyer.

- Biggest problem: Going east on three mile lane left turn to access road & Pacific St very dangerous.
  Dangerous/congested: Three mile lane and Pacific St.
  (Mrs Gene Hansen - Pacific Street)

- Biggest problem: To get to my property and the east part of McMinnville, starting at a point of reference from Hwy 99 to Hwy 18 going East, I have to go all the way to the signal light, and then cross over Hwy 18, then turn left, going West, on an access road to get to my property on Atlantic & Tillbery. (Victor & Dorothy Brown - Amity)

- Biggest problem: We need a direct entrance to the highway and off. We have to go out of our way to come into town. (James Milk - Lawson Lane)

- Biggest problem: Poor lighting and pedestrian safety along the sides of the highway. Sidewalks and curbs should take the place of the ditches along the highway strip within city limits. Lights on both sides of the highway, and brighter ones would improve drivers' vision within our city to see where they (are) guiding their cars.
  Dangerous/Congested: Exits off the highway and entrances onto the highway. Signal lights need (to be) installed to breakup the constant traffic flow. (Ron & Janet Nalley - Kingwood Court)

"Road of the Future" Choices

Note: The statements under A.1.a and A.2.a below were not intended as choices, but were to explain what might occur under A.1 and A.2. However, the selections do offer an insight into the public's opinions/preferences, and are therefore included.

A. What service do you want the road to provide?
   1. Move people to/around McMinnville 3
      a. This Means:
         i. Few direct accesses 4
         ii. Uses more property to build:
            (a) Frontage Roads 10
            (b) Separated Grade Inter 2
         iii. Few Traffic Lights 1
         iv. Limits ability 0
         v. Less congestion 0
         vi. Faster movement 2

      TOTAL 22

   2. Serve as primary means of land access 2
      a. This means:
         i. More direct access 0
         ii. Less property for road work 5
         iii. Increased . . . cross road 0
         iv. Encourage development 0
         v. More congestion & slower movement 0

      TOTAL 7

B. What means would you use..think others use to travel?

   1. Bus Service
      a. Local 1
      b. Through Only 0
      c. Commuter Express 8

   2. Park & Ride
      a. Car Pool 2
      b. Transfer to bus 2

   3. Bike/Walk
      a. Sidewalks 0
      b. Separate Bike Lanes 4
      c. Shared Shoulders 4

4. None of these 2

C. What should the road look like?

1. Basic and functional (like now) 11

2. Bordered by development 0

3. Landscaped Entrance to City 3

D. Would you like to see a north-south road connecting 99W & 18?

1. No 0

2. If Yes, Where?
   a. Norton Lane 11
   b. Near Armory Way 1
   c. Extend Loop/Reid 2
   d. Expand Lafayette 3
   e. Other - draw on map 0

"Write/Draw On Map" Notes

- At intersection with Lafayette Hwy - Several accidents over the years. North-South traffic rushes (hard to get out) to get onto/or across 18.
- Underpass to accommodate Loop Road and Wallace (Cruickshank?) Road traffic.
- Intersection of 18 & Cruickshank - Need signal. Hard to get onto 18 in mornings (eastbound) center lane is used by cars on Cruickshank and Loop.
- Use shared parking lot for Bus/Park and Ride. Commuter Express to Salem. Prefer to connect to Cherriots outside Salem (YCAP).
- Bus Stops at Airport, Old Stone Village, and Tanger. (YCAP)
- Old Stone Village owner want to purchase industrial land bordering and convert to trailer/RV.
- If development (commercial) occurs, will airport become a controlled airfield? (Impression is the speaker wants it controlled).
- Lots of people speed through (miss) stop sign out of McDonalds trying to make light on Highway.

- YCAP would like to make hourly bus runs to hospital. Were hospital entrances, etc. designed to handle bus/vans (overhangs)?
- Twelve acre parcel west of hospital should be commercial.
- Suggestion to expand UGB/city limits to edge of flood plain roughly parallel to river from interchange (Lawson Lane) down to southwest corner of large block of industrial land.
- Don't take my house. (End of Martin Lane)
- Want direct access from ramp to frontage road (Lawson/Martin Lane) vicinity.
- Third and Johnson Streets need work.
- Bridge needs widening. Pedestrians can't use. Widen from bridge to interchange for parking. Left turn lane to access Pacific or Nettemiah (going south) is needed. Ditto. Ditto. People turn left now.
- Line drawn from Norton to the north with words; Belt Line Road.
- Area between Lawson and Trailer Park - believe this will go high density residential.
- The attached map contains notes which, in some instances, duplicate those above.

Summary of Public Open House #2

Attendance

- Fifty-eight in attendance; does not including steering committee.

Survey Results

- Thirty-five surveys were completed. (Includes two after the open house.)

Questions and Results (Note: Not all surveys had every question completed.)

1. Which transportation alternative did you prefer?

   a. Frontage Road 16
   b. Alternate Bypass 10
   c. Neither 9

2. Both alternatives have an optional frontage road location shown north of the airport and Three Mile Lane. Which location do you feel best serves future needs?

   a. The one closest to Three Mile Lane 19
   b. The one furthest north 7
   c. Both 0
   None (An added in response) 3

3. The frontage road alternative also has an optional frontage road location south of Three Mile Lane. Which location do you feel best serves future needs?

   a. The one closest to Three Mile Lane 18
   b. The one furthest south 8
   c. Both 0
   None 3

4. Under the Frontage Road alternative, the north-south arterial needs to cross Three Mile Lane at the interchange east of Kingwood; however, from there it could go west to Norton and then north, or it could go northerly without connecting back to Norton. Do you feel Norton should be used?

   a. Yes, go west to Norton, connecting north of Tanger, then along Norton 11
   b. No, proceed northerly and don't worry about connecting to Norton 19
   c. Other 0
   None 1
   Both 1

Comments:

- You should not ruin the campus of one of your largest businesses.
- Evergreen should not once again be the victim of your planning as relates to land loss/use.
- Needs more discussion.
- Good Luck
- All of my comments are contingent upon what happens to the urban growth boundary and the zoning changes, particularly farmland.
- Try not to use anymore farmland - why not double deck the existing 18.
- Alternate bypass is lesser of two evils.
- The alternate bypass is a cleaner, less confusing solution. It moves Hwy. 18 away from the McMinnville East Entrance.
- Instead of all this, why not make the existing road wider, and save a lot of money.
- Question #2 - whichever is cheaper.
- Question #1 - Frontage road if something has to happen. Would like it if neither were necessary.
- Question #3 - Frontage Road furthest south if its behind the hospital.
- Stop sign at McDonalds on Norton Lane. Accidents will happen. Too many close calls for me already when turning left onto frontage road in front of cars at stop sign. They start to go as I start my turn. The access is bad !!
- Looks like a huge waste of money. Wait until something is really needed.

Technical Comments Made to the Staff Manning Stations

Land Use

- If right-of-way is obtained for the work in an area assumed to become, for example, residential but is being used for agricultural; will the property owner be compensated for residential or agricultural land.

- The Evergreen property will never be developed except for maybe the Air Museum over by Cruickshank.

Frontage Road Alternative

- After the various accesses onto 18 are closed, you should get rid of the curves which were placed to allow queuing, and instead run the frontage roads directly parallel to 18. e.g. Norton, Armory

- Can't you just widen the road at intersections allowing a long acceleration lane ?

- Can't you take up less room for the southern roads on the new interchange in phase three?

- How can we get up signs to direct travelers to our place when you cut off access from 18? The city (state) is very strict on what they allow? (current rules perceived as inadequate)

- I want to increase the RV spaces from 28 to 78 (if I buy the land, the city likes RVs in the area over mobile homes, because RVs are easier to move if air traffic picks up). But RV businesses need better and more direct access off the highway than regular businesses because they are difficult to maneuver.

  — Ought to grandfather existing accesses.

  — Prefer alternate bypass to south of highway (Note: Need to count this in survey of preferred alternatives)

  — Don't see need for frontage road along northern part of Evergreen property just for Olde Stone. Let Olde Stone go east to Loop and leave Loop as a direct access onto the highway. Evergreen, if they develop, could just connect their property to the north-south arterial and use interchange.

  — Loop and Cruickshank should be "t'd" across from one another.

  — Three direct accesses onto 18 should be OK

- Use existing right-of-way to construct frontage road on south side of highway. Acquire right-of-way only for north side for road widening and frontage road. Would result in less impact to existing Evergreen facilities and less right-of-way would be necessary (DF)

- The people living on Lawson and Martin Lane will have to go further out of direction to get to Highway 18 or going into town via the Spur (after Phase 2 is done)

General

- Bike Travel on 18 Spur is very hazardous. The S. Yamhill River Bridge is not wide enough to provide an adequate shoulder bikeway. The sidewalks(on the bridge) are very narrow and unsafe for pedestrians as well. What plans are being developed to improve this part of the system?

- Where will the N-S Arterial Road connect to Highway 99W?

- Where is the project physically located with respect to the possible toll road to bypass Newberg and Dundee? Will this highway connect to it somehow?

- Who is going to pay for all these improvements? Specifically, what part is ODOT paying for?

- Concerns over revising access pattern to airport & impacts to north end of instrument runway.

June 23, 1995

Mid-Willamette Valley
Council of Governments
105 High Street S.E.
Salem, Oregon 97301

Attn: Wayne L. Rickert, Jr.
Senior Planner

RE: McMinnville Corridor Refinement Study

Dear Wayne;

It was a pleasure discussing with you on the phone earlier in the week as to the design concept for the McMinnville Three Mile Lane Corridor. As I mentioned on the phone, I am viewing the alternatives for their cosmetic and functional duties. The cost comparison I have left for you.

The frontage road alternative will leave the area with nine to eleven lanes (including turning lanes) of concrete that I fear will give me the feeling that I am traveling down the Santa Ana Freeway rather than the countryside of McMinnville. Median strips of landscaping between the roads of twenty to thirty feet to soften the look will leave the City of McMinnville with a large monthly maintenance bill to water, feed, mow, and tree trimming. I understand the frontage road alternative is preferred because of the ability to phase in the cost. Also, the city of McMinnville would pick-up the tab rather than the state. However, I feel the alternate bypass is the best proposal. The project could be phased in by making the alternate bypass a two lane highway and later as a four lane highway. There would be no access to the bypass. The alternate bypass would become the urban growth boundary of McMinnville thus opening up a large amount of acreage for future development and system development charges that would have access off the existing Highway 18. The existing Highway 18 with full access would remain the same.

The frontage road alternative gives limited access to service oriented stores (i.e. Tanger Mall) for Portland/Coast traffic and would slow down the response time to the new hospital. The frontage road from the proposed new north/south arterial to Loop Road requires all traffic from Loop Road that wishes to travel east or go to Salem to travel west about 1 mile before reversing. This would increase west bound traffic flowing in front of Olde Stone Village that is unnecessary. The frontage road would take approximately 100 feet of land on the north side of Highway 18 leaving the remaining land between the frontage road and Olde Stone Village of little development value. The City of McMinnville will possibly have to purchase the land since with set-back requirements the remaining land may not be deep enough for the owner to fully develop. Also, the frontage road alternative would eliminate direct access to Highway 18 for Olde Stone Village that is critical for RV (overnight) business.

I feel the frontage road from the Highway 18 interchange to Loop Road is unnecessary and detrimental to Olde Stone Village Mobile Home and RV Park. Since the parcel of land between Olde Stone and the interchange is currently owned by one party, the road is a waste of taxpayers' money to service Loop Road, Olde Stone, and Pacific RV Center. When Evergreen decides to

develop the parcel, a master plan would be required by the city for access off the interchange rather than a frontage road. The money saved by eliminating the frontage road could be used to realign Cruikshank Road and Loop Road as the north/south arterial. An underpass with exit and an on-ramp system at this interchange would better serve Loop Road and Olde Stone Village. This interchange would be a better location for the north/south arterial because Cruikshank Road is used to travel to Salem and this could become the easterly boundary of the urban growth boundary of McMinnville. The right-of-way land to purchase at this location would most likely be less costly than at the proposed location. An underpass is possible with proper engineering as one is currently in existence further east on Highway 18 at Dayton. An underpass would not affect the airport clearance and would allow traffic from Salem to go east or west on Highway 18 plus allow them to continue to the north part of McMinnville via improved Loop Road.

The alternate bypass allows direct access to Tanger Mall, the new Hospital and other existing commercial enterprises via the current Highway 18. Olde Stone's preferred access would be to remain status quo (grandfathered) as it is outside of any major congestion. There is currently direct access on Highway 99 (outside of areas of major congestion) for some residential and commercial properties between Highway 18 and Sherwood. Olde Stone, however, could live with the alternative of the realignment of Loop Road and Cruikshank provided there was direct access to Highway 18 at that location. There would still need to be a short road to serve Olde Stone and Pacific RV through the land owned by the City of McMinnville.

Visible signs will be a major problem with all the alternatives. Large enough signs would have to be allowed for a motorist going 55 MPH to read from a distance. I question whether McMinnville will allow signs for businesses the size of signs on Interstate 5 on Highway 18. One alternative as we discussed on the phone would be to leave the entire length of Three Mile Lane to Loop Road as it exists and have the alternate bypass start east of Loop Road connecting to Highway 18 with an underpass and the bypass running behind the airport.

As I mentioned on the phone, when I design something I try to create the most attractive and functional project possible. I do not take cost into consideration. I take the position that if I cannot have an attractive project I would rather not do it at all. I realize that you do not have that luxury but I feel that if you take into consideration some of Olde Stone's concerns, the end result could be a transportation plan that will be business friendly, attractive, and still solve the area's transportation problems.

In closing, thank you for the time you gave me on the phone. Later this summer when I am in town I would like to meet you in Salem.

Sincerely,

Paul Brewer
Owner of Olde Stone Village
Mobile Home and RV Park
P.O. Box 6956
Laguna Niguel, CA 92607

January 24, 1996

VIA FACSIMILE (503) 588-6094 AND FIRST CLASS MAIL

Mid-Willamette Valley
Council of Governments
105 High Street S.E.
Salem, Oregon 97301

Attn: Wayne L. Rickert, Jr.
Senior Planner

RE: McMinnville Corridor Refinement Study

Dear Wayne;

Thank you for sending me the draft of the Corridor Refinement Study. Having quickly reviewed the proposed designed for access to and from Highway 18 for Olde Stone Village, I want to state for the record that I am completely opposed to the draft design. The reasons for my opposition have been stated in my letter to you dated June 23, 1995 and in the numerous telephone conversations we have had. A viable alternative to the draft design would be a frontage road with access to Highway 18 at Loop Road. I would be happy to work with you to effectuate a design for such a frontage road.

As designed, the proposed access will destroy the overnight recreation vehicle (RV) business at Olde Stone Village. Olde Stone currently has a recorded permit for access to Highway 18 and the loss of that access will cost Olde Stone thousands of dollars of income annually. I estimate the loss of direct access to Highway 18 would also reduce the value of Olde Stone Village by more than $1,500,000. In ten years that value loss could exceed $2,000,000. Accordingly, I cannot concede or in any way allow the loss of Olde Stone Village's direct access to Highway 18 without compensation from the state for the loss of revenue and profitability.

Please also note that your draft design will cause excess traffic and gasoline consumption for travelers from Olde Stone Village using Highway 18. However a frontage road as I have proposed would allow adequate access to and from Highway 18 without undue waste of time or gasoline. One point I have not made until this time, but which is of no less importance, is that a traveler moving eastbound from Olde Stone Village would have to travel westbound before resuming an eastbound direction.

Once again I would like to work with you and your department in drafting a design for a frontage road, as I have proposed. In the event that my proposed alternative is not possible I would request that Olde Stone Village be allowed to retain (grandfathered) its direct access to Highway 18. I would appreciate you making this letter and my June 23, 1995 letter a part of the public record in this matter.

Sincerely,

Paul Brewer
Olde Stone Village
Mobile Home and RV Park
P.O. Box 6956
Laguna Niguel, CA 92607

Edwina and John Castle
10935 Clair Ln. SE
Dayton, OR 97114

January 20, 1996

Wayne Rickert, Jr.
Mid-Willamette Valley COG
105 High Street SE
Salem, OR 97301

Dear Mr. Rickert:

We are writing concerning the McMinnville corridor refinement study and frontage road alternatives. We were out of town during the initial MWVOCOG open house on June 19, 1995. But were happy to hear that safety issues were brought up on the vehicles turning onto or off of the highway to or from intersecting roads.

As you can tell from our address, we have to deal with safely entering and exiting on Highway 18. Our biggest safety risk we experience on a daily basis is the cross traffic entering Highway 18 from Cruickshank as we exit Highway 18 onto Loop road. Cruickshank exit proves to be a challenge of the wits, with anxious commuters from Salem and surrounding areas heading into McMinnville. The divided passing lane helps, yet some westbound commuters are so busy looking over their shoulders and speeding up to merge that they sometimes don't see me patiently sitting there waiting to turn onto Loop Road. (I am in the passing lane heading east.)

Yes, and the folly I experienced the other day prompted my husband to suggest I write you. I am eastbound on Highway 18 waiting for westbound traffic to clear. Meanwhile, THREE anxious drivers on Cruickshank are waiting to merge into westbound traffic. I have right-of-way, or so I think, because I am on the major thoroughfare. Well, the driver on Cruickshank jumps into the passing lane while I am waiting. The others follow his folly and pass him, with the third smiling as he wizzes past everyone. Mind you, maybe common courtesy is a relic of the Model T. Therefore, I am requesting a safe way home, via a stop light. I see all the crazy drivers on Highway 18 speeding to the coast and the casino. I have 2 boys, I want to see them grow up. I am concerned about the safety of the Loop Road/Cruickshank interchange.

My husband and I prefer the frontage road alternative because of the stop light regulated traffic. We also like the Norton Lane connection for Highway 18 and Highway 99.

My husband works at Lawrence Gallery, he is interested in a bike path as well. We do see a lot of bicycle traffic in the fair weather months. As a dance teacher, I not only commute to Sheridan but also to Newberg. We both have to face the safety issues of this Loop/Cruickshank interchange.

Highway 18 is only going to get busier, please keep us informed on the issues. Thank you for considering the safety issues for residents living off of Loop Road.

Sincerely,

Edwina Castle
John Castle

Appendix G: Summary of Alternative Solutions

Solutions

Preliminary Steps

The TAC began its work by investigating some known options to determine what impediments might exist. The first of these options was the use of Norton Lane as a north-south arterial as proposed in the McMinnville Transportation Master Plan. The arterial would provide a connection around the central city for traffic to and from areas expected to have the most employment growth over the next twenty years. The Master Plan projects 760 vehicles using the arterial entering Highway 18 during evening peak hours. The Master Plan determined that the LOS decrease from traffic using the proposed arterial would eventually require an interchange or overcrossing of Highway 18 at Norton Lane. An overcrossing would have less impact to area land use than a full interchange. It was reviewed in detail to determine its practicality as an option. Two overcrossing design styles were investigated: one with overcrossing approaches established on standard fill slopes and the other with retaining walls. The standard fill style required land extending perpendicularly well into both Tanger and McDonald's lots. The wall style would be more expensive and place an unsightly concrete blockade between the east and west sides of Norton Lane. Both styles require an overcrossing approach to leave ground level in the vicinity of Aaron Drive of River Bend subdivision. Residential streets and commercial entrances/exits intersecting Norton Lane would require relocation. Also, model runs did not show a significant overall traffic benefit from an overcrossing in this area. The placement of an interchange in this area was found to be impracticable because of major impacts on existing developments. Additionally, vehicle conflicts would result from attempting to accommodate weaving, merging, and other movements between interchanges located too close together.

The TAC recognized that encouraging multimodal opportunities was important to the plan and that vehicular traffic solutions may impede the bicycle/pedestrian travel options. Therefore, the possibility of a pedestrian/bicycle overcrossing was investigated. The TAC determined that such a structure was likely to be needed in the area of Norton Lane, although a precise location should be determined later.

Preliminary data also indicated that the existing East McMinnville interchange would eventually require conversion to an all directional interchange, so the TAC investigated potential impacts of such a change. As part of this effort and in response to public comments, it was determined that the Nehemiah Lane intersection with Highway 18 Spur should be relocated across from

the frontage road on the east of the Spur, the Spur widened with a left turn lane, and a signal installed.

In addition to the East McMinnville interchange upgrade, early indications were that a second interchange would be necessary to distribute traffic to and from industrial lands at the eastern end of the corridor as well as accommodate a north-south arterial. The TAC investigated three potential sites using criteria such as technical feasibility, traffic impacts, and impacts to existing development areas.

- The first area investigated was between Armory Way and Cruickshank Road; however, three significant problems were encountered with locations along that section of the highway.
  - First, the overcrossing approach and ramps for the interchange extended well into the airport including aircraft parking areas and taxiways.
  - Second, above ground sites located near Cruickshank were flawed because of facility height restrictions and the runway safety zone limits.
  - Third, traffic circulation patterns and buildings at a major employment center, Evergreen International Aviation, Inc. were severely impacted.
- An interchange further east was also discussed but rejected because it did not serve the city's needs either as a connection for the north-south arterial or land access along the corridor.
- An interchange east of Kingwood Subdivision and west of the Evergreen Complex offered the best alternative.
  - Least impact on land uses.
  - Served need as an access for north-south arterial.
  - Minimize traffic conflicts.

Undercrossing

An undercrossing at or near Cruickshank Road was also discussed and initially rejected because of reported water level problems in the area, but a subsequent review by a state geologist indicated the water levels should not prevent an underpass in the area, providing drainage controls were adequate. Initial impacts noted were:

- Removes need for a wide southern collector-access road. Narrow two lane would be adequate from new interchange to Cirrus Ave. Also would facilitate routing the collector-access road south of Armory.
- Routing Cruickshank Road traffic to the north would negatively impact the LOS on an east-west collector access north of Highway 18.

Later, this possibility was re-examined in greater detail and the following observations were made:

- The construction and drainage costs were estimated to increase the collector-access option by $1,900,000.
- The pump system necessary for this option would require extraordinary maintenance and, even then, mechanical failures would increase after several years.
- All Cruickshank Road traffic could route to the north, preventing unnecessary traffic through the industrial area.
- Advantages of this solution are better accommodated by other solutions.
- On/off ramps with Highway 18 were not practical.

Shifted Highway

An option to shift a portion of the existing highway to the north was also studied.

- The benefit of this option was the frontage access roads between the proposed new interchange and the airport land could be used as originally envisioned.
- Extensive utilities (water, electrical, fiber optics, sewer) lie in the area to be shifted, so relocation and construction costs would potentially increase by $6,200,000, excluding additional right-of-way, with no additional transportation gains.

Widening/Turning Capacity

Widening the existing road and adding more turning capacity at intersections were also among the options reviewed.

- Increasing turning capacity offers some interim benefit, but widening offered little benefit either for local or through traffic.
- Regardless of the road's width, over time a growing volume of local traffic will seek to enter Highway 18 from intersecting roads and either accidents increase as drivers become impatient and attempt to jump into the flow of traffic, or there will be a demend to place a signal at the intersection to help with entering and to enhance safety.
- Signals result in slowing and congesting traffic on the through road. This in turn causes the road operation to deteriorate over time.

Bypasses

As discussed in the section on Transportation Needs and Solutions, a significant alternative to the chosen collector-access alternative was the alternative bypass option (see Figure 13). The advantages and disadvantages are well documented earlier in this plan. Variations of the alternate bypass alternative were also discussed. Some of these were based on connecting to the Newberg-Dundee bypass and/or rerouting several miles of Highway 99/18 over state and county roads.

- Locations run counter to sections of the transportation planning rules and would require considerable Goal 12 exceptions and special permits to widen, straighten, and construct new roads.

- A loss of connection to the cities would occur.

- The ability to construct by phases is lost and the cost increases dramatically.

These disadvantages make it likely that such a system would not be constructed for decades past this planning period and the Three Mile Lane corridor would become a severly congested roadway and remain that way for years.

Double Decking

Two suggestions were received for a "double decked" highway. The primary disadvantages of this option are increased cost (up to $44 million) and loss of ability to phase the work as needed.

Modification of Collector-Access Road Locations

The TAC studied modifications of the collector-access road locations to determine the optimal collector-access road system. Most of the effort was directed towards dealing with the area between the proposed new interchange and Cruickshank Road. These efforts resulted in the final solution shown in the main body of this plan.

Aspects of each modification are as follows:

Modification 1: Close Cruickshank near airfield and let traffic use Lafayette

- Removes the need for a frontage road from Cruickshank to Cirrus.

- Removes concerns of Airfield Manager and State Aeronautics over facilities near the airport (see Modification 2 - Move Cruickshank).

- Removes left turn conflicts with Loop Road.

- Removes need for three-lane frontage road from the new interchange to Cirrus because lower traffic volumes will facilitate routing part of the frontage road behind Evergreen property.

- If the Air Museum is located near Airport Road, the traffic generated will use Lafayette Highway intersections to reach and leave the attractions. That intersection may then need improvements.

- May add as much as 4018 ADT to the southerly approach to the Lafayette intersection which presently has an ADT of 2070.

- Adds a worst case 2.6 round trip miles (4.2 kilometers) for some traffic [Cruickshank to Lafayette Highway is approximately 1.3 miles (2.1 kilometers)]. For drivers accustomed to accessing Cruickshank from Lafayette, the additional distance is estimated at slightly under one mile (1.6 kilometers).

- The highest number of accidents near the study area is at the Lafayette Intersection (six nonfatal accidents in three years).

- Modifications to the Lafayette intersection will be necessary to handle increased traffic. The modification (overpass - jughandle) will improve safety and more than make up for the additional travel time; since by the time it is constructed, the delays to enter Highway 18 from Cruickshank Road will be excessive.

Modification 2: Move Cruickshank approximately 100 feet (30.5 meters) east and/or start a frontage curve closer to Highway 18

- The present frontage road option is within the 1000 foot (304.8 meters) Runway Safety Zone and will require FAA waiver if left as shown on conceptual plan.

- Limit frontage road to two lanes in this area, which is inadequate in the long term. Road passes close to Petroleum. Oil, Lubricant (POL) storage area. No fire standards strictly apply. An interpretation of Fire Codes implies five-foot (1.5 meters) separation between edge of road and any pipes may be necessary.

- Land between Cirrus and Cruickshank is owned by the city.