

**DETROIT COMPREHENSIVE PLAN
(Document Cover)**

ACKNOWLEDGEMENTS

(existing 1978 and 2002 to remain on the acknowledgements page)

Proposed addition to the acknowledgements section

2009

The updated Transportation Element and the adoption of the Transportation System Plan (TSP) (referenced as an attachment to the City of Detroit Comprehensive Plan) is the result of many hours of review by City staff and members of the Planning and Technical Advisory Committees.

The consultants greatly appreciate the dedicated time and efforts of the local citizens, City staff and staff members of the various agencies in completing and adopting revised Comprehensive Plan, revised Comprehensive Plan maps, and the City's first Transportation System Plan (TSP).

Land use Planning, Community Development, Mid-Willamette Valley Council of Governments
Parametrix

ORDINANCE PAGES

(All previously adopted and included ordinances pages to remain)

Additional ordinance to be inserted following adoption by the City of Detroit, City Council

Ordinance No. 218

Ordinance Adopting:

**Revisions to the Comprehensive Plan, Transportation Element;
Revisions to the Comprehensive Plan Map;
Adoption of a Transportation System Plan (TSP) and
A Slope Hazard Map
For the City of Detroit**

An ordinance amending the Comprehensive Plan, Transportation Element; revising the Comprehensive Plan Map; adopting a Transportation System Plan (TSP) and Slope Hazard Map in compliance with the State Transportation Planning (TPR) and Statewide Planning Goal 12: Transportation, and Declaring an Emergency.

WHEREAS, on May 26, 2009, the Planning Commission conducted a public hearing to consider action to amend all or portions of the Physical Characteristics, Economic and Energy, Land Use, Transportation, and Public Facilities Elements and subsequently recommended to the City Council their adoption; and

WHEREAS ON JUNE 9, 2009, the City Council of Detroit conducted a public hearing to consider action to amend all or portions of the Physical Characteristics, Economic and Energy, Land Use, Transportation, and Public Facilities Elements,

NOW, THEREFORE, the City of Detroit, Oregon, Marion County ordains as follows:

Section 1: Element 2 (Physical Characteristics). City Ordinance 64 is hereby amended by adopting certain revisions as presented in the applicable Element, Exhibit A.;

Section 2: Element 3 (Economics and Energy). City Ordinance 64 is hereby amended by adopting certain revisions as presented in the applicable Element, Exhibit A.

Section 3: Element 4 (Land Use). City Ordinances 64 and 185 are hereby amended by adopting certain revisions as presented in the applicable Element, Exhibit A.

Section 4: Element 6 (Transportation). City Ordinance 64 is hereby amended by adopting certain revisions as presented in the applicable Element, Exhibit A.; and

Section 5: Element 7 (Public Facilities) City Ordinance 64 is hereby amended by adopting certain revisions as presented in the applicable Element, Exhibit A.; and Revokes Ordinance No. 162 Permitting the Extension of Public Sewer Service to the City of Idanha, USDA Forest Service Installations, and Oregon State Parks.

Section 6: Declaring an Emergency. The City Council for the City of Detroit deems and desires it necessary for the preservation of the health, peace and safety of the City of Detroit that Ordinance 218 takes effect at the beginning of the next fiscal year, and therefore, an emergency is hereby declared to exist and this Ordinance shall be in full force and effect from July 1, 2009.

FIRST READING: _____

SECOND READING: _____

PASSED and by the Common Council of the City of Detroit on this 9th day of June 2009. **Approved by the Mayor on this 9th day of June, 2009.**

AYES: _____

NAYS: _____

EFFECTIE DATE: July 1, 2009

Signed: _____
Margaret Scott, Mayor

ATTEST

By: _____
Christine Pavoni, City Recorder

**COMPREHENSIVE PLAN
FOR THE
CITY OF DETROIT**

July 25, 1987

June 11, 2002

June _____, 2009

The Oregon Department of Land Conservation and Development provided grant funding for the 2002 amendments to the Comprehensive Plan.

The Oregon Department of Transportation and the Oregon Department of Land Conservation and Development provided funding under the Traffic-Growth Management program for the 2009 amendments to the Comprehensive Plan, Transportation Element, and the adoption of the City's Transportation System Plan

TABLE OF CONTENTS

(Chapters and Titles to remain the same)

Page numbers to be adjusted accordingly

List of figures, maps, and tables to be updated accordingly

II: PHYSICAL CHARACTERISTICS

Detroit Comprehensive Plan

(cover page to remain the same)

SETTING, HISTORICAL CONTEXT, CLIMATE, GEOLOGY, SOILS, OPEN SPACE AND SCENIC RESOURCES, WATER QUALITY, FOREST LANDS, HISTORIC AND CULTURAL RESOURCES sections remain unchanged.

TOPOGRAPHY AND SLOPE

Elevations in Detroit range from 1509 feet on the shores of Detroit reservoir to a maximum of 2000 feet on the hillsides of the eastern City limits. Drainages generally run from a westerly to easterly direction with the exception being on the south side of the City where drainage systems run north to south. As will be discussed in later chapters, steep slopes are one of the major limiting factors in the future development of the City. **In 2009, the City adopted a map to indicate the location of areas within the community having greater percentage of slopes.**

III: ECONOMICS & ENGERGY ELEMENTS

Detroit Comprehensive Plan

(cover page to remain the same)

INTRODUCTION

The purpose of the Comprehensive Plan's Economic Element is to describe the basic economy of the City, and to development policies for the future economic well being and development of the City. The economics element must also analyze data concerning the residents of the City, which is obviously the "bottom" line of the economy.

This element consists of three sections: 1) population projections for the City prepared by ~~Marion County~~ **the Mid-Willamette Valley Council of Governments using information prepared by Portland State University**; 2) data about the basic economy of the City, such as commercial and industrial growth, and municipal financing; and 3) current and future energy sources.

The citizens of Detroit wish to expand and diversity their economic base in the future and, therefore, it is the goal of the City of Detroit:

To maintain the existing level of Detroit's economy and to encourage future economic growth, especially in areas relating to the recreational nature of Detroit.

POPULATION

A projection of population growth is an essential step in the comprehensive planning program. A projection serves as a tool for assessing future land needs, water facility planning, recreation needs, and the capability of lands within the corporate limits of Detroit to accommodate projected growth.

Population ~~projections~~ **estimates** in Table 1 for the City of Detroit were developed by ~~both the City and the~~ the Mid-Willamette Valley Council of governments using materials provided by Portland State Univeristy, Population Research Center, and in cooperation with Marion County Planning Department. ~~The projected population for each five year period was based upon the City's past growth rate, the energy crisis, employment, annexation policies, availability of urban services and school capacity, to name a few.~~ Data used to develop the forecasts include vital statistics; population, land use, building permit and

employment data; and school enrollments for districts within Marion County. Analysis continues by using different demographic methods and models. Given that the projections are developed for long-term trends (2007-2030), they are conservative.

~~DELETE CURRENT TABLE 1~~

TABLE 1 – Part 1
Population Estimates to the year 2030

	Historical			Forecast				
Year	1990	2000	2005	2010	2015	2020	2025	2030
Population	331	262	255	265	322	340	355	371

Population Forecasts for Marion County, Population Research Center, Portland State University, September 2008

TABLE 1 – Part 2
Average Annual Change in Number and Average Annual Growth Rates

	Historical		Forecast					
Year	1990-00	2000-05	2005-10	2010-15	2015-20	2020-25	2025-30	2010-2030
Average Change in Number	-7	-1	2	11	3	3	3	5
Average Change in Percentage	-2.3 %	-0.5 %	0.8 %	3.9 %	1.0 %	0.9 %	0.9 %	1.7 %

Population Forecasts for Marion County, Population Research Center, Portland State University, September 2008

Detroit is located in Census Tract 106 that also includes Idanha, Mill City and Gates. ~~More than one half the population resided within the corporate limits of the four communities.~~ Although the ~~1990~~ 2000 census information ~~is~~ **will soon be** dated, the data is generally reliable since population growth has not been significant since ~~1990~~ 2000.

For the ~~entire census tract~~ **the City of Detroit**, the median household income was ~~\$30,484~~ **\$32,250**, which was ~~more~~ **less** than Marion County's median family income of ~~\$26,876~~ **\$40,3145**. The per capita income for ~~Census Tract 106~~ **the City of Detroit** was ~~\$11,658~~ **\$19,856**. **Almost 50 percent of the families earn less than \$35,000 per year.** In ~~1990~~ **2000**, there were ~~78~~ **12** families, **17.9** percent of which live below the poverty level **versus 9.6 percent for Marion County**. ~~Approximately 82 percent of all families and individuals living below the poverty level earned their incomes and 18 percent received public assistance.~~

The ~~1990~~ census reports that Detroit had an average of 2.28 persons per household that was slightly less than the average of 2.60 for ~~Marion County~~. **According to information gathered by Portland State University in 2007, the average number of persons that occupy a household (PPH), or household size, in Marion County is around 2.7 and is higher than it is statewide (2.5). The smallest average household size, 2.2 PPH, is in the City of Detroit.**

~~Table 2 shows Detroit growing at a gradual pace since the early 1950s~~ **shows a population history for the City of Detroit between the years 1950 and 2000.** In the decade between 1980 and 1990 **indicates a period** ~~the only time~~ showing a population loss. This loss ~~is~~ **was** most likely due to decreasing employment in the timber industry as federal timber harvests decreased and local lumber mills closed. Tourism is replacing the old, natural resource based economy. **According to information from PSU, population growth will continue but at a slow rate. The average annual growth rate to the year 2030 coordinated with Marion County Planning Department is 1.7 percent.** ~~In addition, when the sewer system goes on line, much more development will be possible within the City.~~ **The City does not have a public sanitary sewer system. Lack of a system also affects growth. Because Detroit is a resort community, the year round population is estimated to be about one-quarter the summer population.**

TABLE 2
HISTORY OF POPULATION GROWTH
DETROIT, OREGON

Year	Population	Percent Change
1952	206	35.4
1960	279	17.5
1970	328	17.5
1980	367	11.9
1990	331	-9.8
2000	500	51.1

Source: Marion County Planning Department

Although Detroit's population is projected to increase by only ~~155~~ **106** persons ~~within the next 20 years~~ **by the year 2030**, its population growth and land development will actually depend upon such factors as the availability of buildable land within and outside the City, sufficient water, and the method of sewage disposal.

The sections of THE ECONOMY and ENERGY remain unchanged.

IV: LAND USE ELEMENT

Detroit Comprehensive Plan (cover page to remain the same)

INTRODUCTION

A land use plan indicates the area into which various types of activities are expected to occur. Detroit designates five categories of land uses. There is currently no land designated Industrial Commercial.

1. Single-Family Residential. Areas designated as single-family residential shall have a minimum lot size of ~~5,000~~ **12,000 square feet**. New subdivisions and planned unit developments shall have a minimum of **3 to** 4 units per acre.

2. Multi-Family Residential. Areas designated as multi-family residential shall have a maximum lot density of one (1) unit per 1,500 square feet of gross area.

3. Commercial General. Commercial uses include all activities of a commercial nature

There is not distinction between what kinds of commercial activities the City allows. The specific zoning regulates uses.

4. Industrial Commercial. Industrial uses cover the range of manufacturing, warehousing, and wholesaling activities. Manufacturing activities are limited to light industrial uses.

Detroit does not contain any land zoned for industrial uses.

5. Public. Public uses shall include all government and semi-public lands and uses.

6. School and Parks.

The land designation in the Comprehensive Plan are of a general nature intended to indicate the expected community growth pattern. Implementation of the plan occurs through more specific actions such as zoning, subdivision control, annexation review, Urban Growth Boundary administration and public facilities planning. Although the plan is designed to be somewhat flexible, it must be understood that it is a significant policy statement and a great deal of responsibility must be exercised in its use and updating.

In 2001, the conducted a buildable land inventory. **Table 7** shows the amount of developed acreage by zoning designation with the City.

**Land Use Element – Table 7
Developed Land Uses within the Detroit UGB
By Zone, 2000**

Zoning Designation	Acres*	Percent of Total Area
Single-family Residential (SF)	152.9	81.4%
Multi-family Residential (MF)	2.9	1.5%
Commercial General (CG)	14.9	7.9%
Industrial Commercial (IC)	0	0%
Public (P)	6.9	3.7%
Schools and Parks (SP)	10.3	5.5%
Total	187.8	100%

Source: MWVCOG, 2001

*Acreage date is from Marion County Assessor and does not include public rights-of-way

BUILDABLE LANDS INVENTORY

The analysis of residential land includes totals for land that is completely vacant, partially vacant, and redevelopable. The analysis of commercial and industrial land includes totals for land that is completely vacant and redevelopable.

The following parameters are used to determine whether land is partially vacant and/or redevelopable.

*Vacant land includes all parcels at least 5,000 square feet (0.11 acres) in size with improvement values of less than \$5,000. The minimum lot size for residential parcels in Detroit ~~is~~ **at the time of the 2001 inventory was** 5,000 square feet.

*Within the City limits, partially vacant land **at the time of the inventory** consisted of residential parcels that are at least 0.50 acre in size with an improvement value of at least \$5,000. This analysis assumed that 0.25 acre ~~is~~ **was** devoted to the existing house, with the remainder considered vacant. This amount ~~is~~ **was** added to the amount of gross buildable land.

*Redevelopable land included parcels in all zones where some limited improvements ~~have been~~ **were** made, but where potential for redevelopment for more intense uses is high. For the purpose of ~~this~~ **the 2001** analysis, redevelopable land ~~is~~ **was** defined as parcels in all zones with improvement values of at least \$5,000, where the ratio of land value to improvement ~~is~~ **was** 1:1 or greater. For residential parcels, this land ~~may instead be~~ **was** classified as partially vacant. The area of redevelopable parcels ~~is~~ **was** added to the amount of gross buildable land.

Figure 2 shows vacant, partially vacant, and redevelopable land with the Detroit urban area by zoning designation. (1)

(1)The Urban Growth Boundary (UGB) and City limits are the same for Detroit. The terms: “urban area,” “UGB” and “City limits” ~~will be~~ **were** used interchangeably in ~~this~~ **the 2001** report.

Residential Land

Table 8 shows the amount of buildable land for each residential zoning district within the Detroit City limits **as assessed in a land inventory conducted in 2001**. **At that time,** ~~A~~ approximately 58.1 net buildable acres ~~are~~ **were** available for residential development within the City. In Detroit approximately 12.63 acres designated for residential use ~~can be~~ **were then** considered redevelopable. **The data collected in early 2000 indicated that** ~~A~~ approximately 155.8 acres within the Detroit UGB ~~are currently~~ **were** developed for residential use.

**Land Use Element – Table 8
Buildable Residential Land
Detroit, 2001**

Zone/Plan Designation	Vacant (acres)	Partially Vacant	Redevelopable	Total*
Single-family Residential (SF)	40.9	3.3	10.9	55.1
Multi-Family Residential (MF)	0.6	0.4	1.7	3.0
Net Buildable Acres Within City Limits*	41.7	3.8	12.6	58.1

Source: Marion County Assessor data, MWVCOG, 2001.

*Numbers may not total exactly due to rounding

Commercial Land

Table 9 shows that approximately 7.7 net vacant acres ~~are~~ **were** available **in 2001** for commercial development with the Detroit City limits. Approximately 3.6 acres designated for commercial use ~~can be~~ **were** considered redevelopable. Approximately 20.2 acres with the Detroit UGB are currently developed for commercial use.

**Land Use Element – Table 9
Buildable Commercial Land*
Detroit, 2001**

Zone/Plan Designation	Vacant (acres)	Redevelopable	Total*
Within City Limits			
Commercial General (GC)	4.0	3.6	7.7
Net Buildable Acres Within City Limits	4.0	3.6	7.7

Source: Marion County Assessor data, MWVCOG, 2001.

*Numbers may not total exactly due to rounding.

Industrial Land

The Detroit Development Code includes a zoning designation for Industrial Commercial uses. No land is currently allocated to this zoning designation. Some light industrial uses are permitted as a conditional use in the Commercial General zone. Should the City determine that a need exists for industrial land, the City can allocate this zone later.

LAND NEEDS ANALYSIS

The buildable lands inventory uses in conjunction with the 2020 population projection to determine if adequate land is available for future residential, commercial, and industrial development.

FUTURE RESIDENTIAL LAND NEEDS

Average Net Density

To determine the amount of land needed for future residential development, it is necessary to calculate the

average net density for the various types of housing development including single-family and multi-family.

Residential areas in Detroit have developed at relatively low densities due to the lack of a sewer system. All residential dwellings are served by on-site septic systems that require a large lot size for adequate drain fields. The current average for single-family residential areas is 1.3 units per acre. Multi-family residential areas have an average density of approximately 0.5 units per acre.

~~Detroit is expected to have a sewer system by Spring 2003. When the sewer system goes online, it is predicted that development will occur at densities much closer to the maximum permitted by the single-family and multi-family zoning regulations. Therefore, the average net densities used to conduct the analysis of future residential land needs are:~~

- ~~—Single family residential — 6.22 units/acre~~
- ~~—Multi-family residential — 14.52 units/acre~~

The housing needs analysis **completed in 2001** (see Table 10) identified 147 new residential units that ~~will be~~ needed to accommodate the projected 2020 population of 535 person. Of the 147 new residential units, 54 percent, or about 79 units, are needed to meet projected need for rental units. Based on the 2000 Census figures, about 81 percent of the local rental market is comprised of single-family residences. Therefore, of the additional 79 rental units, it is assumed that 19 percent will be multifamily housing units. Based on this assumption, then, approximately fifteen (15) new multifamily residences will be needed to meet the projected need in 2020. In addition, as shown in Table 8, the current rental market supply ~~in 2001 is currently was~~ about 24 units short of meeting the existing need. **Consequently, the analysis determined** that in order to meet existing and projected need for such housing, 20 additional multifamily units will be needed ~~over the next 20 years~~ **to meet a demand projected for the year 2020.**

**Land Use Element – Table 10
Projected Housing Mix and Residential Land Needs
Detroit, 2020**

Housing Type	Existing Units 2000	Units Needed 2020	Percent of New Units	Net Density (units/acre)	Acres Needed 2020
Single-Family	133	127	86.4	6.22	20.2
Multi-Family	5	20	13.6	14.52	1.4
Total	138	147			21.6

Source: MWVCOG, 2001.

Based upon an analysis completed in 2001 and ~~Looking~~ looking back at Table 8, adequate vacant, partially vacant, or redevelopable land, is available to accommodate future housing needs within the existing urban growth boundary. The buildable lands analysis found that approximately 58.1 acres ~~are were~~ available for residential development with the entire urban area. The analysis concluded that ~~An~~ an estimated 21.6 acres will be needed to accommodate residential growth through 2020.

As determined in the year 2001, ~~Ab~~ about 1.4 acres of land designated for multi-family will be needed by 2020. Table 8 shows that about 3.0 acres of land zoned MF are currently available for development within the City limits.

Approximately 20.2 acres will be needed **(according to an assessment conducted in 2001)** for single-family development through 2020. ~~At present~~ **In 2001,** about 55.1 acres zoned SF ~~are~~ available to accommodate single-family residential development with City limits.

FUTURE COMMERCIAL and INDUSTRIAL LAND NEEDS

Population projections and need for commercial industrial land. The 1986 General Plan update used for the 1986 update ratio of .009 acres per person to identify the amount of land needed for commercial use, and a ratio of .04 acres per person to identify the amount of land to reserve for industrial development. **Table 11** reflects use of the ratio using the lowest population projection.

**Table 11
Industrial and Commercial Land Needs**

Zone	Acres per person	2020 population	Acres needed	Acres developed	Acres Available	Surplus (Deficit)
Com.	.009	535	4.8	20.2	7.7	2.9
Ind.*	.04	535	21.4	0	0	(21.4)

Source: MWVCOG and ~~Genesee~~ **Detroit** General Plan

Note: The “acres per person” are from the 1986 General Plan.

*Some light industrial uses are conditional uses in the Commercial General zone. Surplus commercial land could be used to accommodate some of the industrial land deficit.

Additional analysis is provided in the City’s Water System Master Plan, dated October 2008—Sections 2.3—Developable Land, and 2.4—Population.

**Land Use Element
Goals and Policies**

GOAL: To provide adequate lands to service the needs of the projected population to the year 2020, and to ensure the conversion of property to urban uses in an orderly and timely manner.

Policies: General: (Numbers 1 through 6 to remain unchanged.)

7. Development shall not be permitted in areas identified as having severe development restrictions. To help determine one category of severe development restrictions, the City adopted a slope map in 2009. Development within the area shall provide an engineering analysis toward assessing the suitability for development.

Policies: Residential Land: (Numbers 1 through 6 to remain unchanged.)

Policies: Commercial Land: (Numbers 1, 2, 4 and 5 remain unchanged.)

3. The mixing of uses in the commercial area will provide a means of access to transportation, housing, and shopping to those persons who need to locate near the various facilities. **Residential uses shall be permitted only in conjunction with non-residential uses within commercial areas.**

Policies: Industrial Land: (The one policy remains unchanged.)

Policies: Public and Schools and Park Land: (Numbers 1 and 2 remain unchanged.)

VI: TRANSPORTATION ELEMENT
Detroit Comprehensive Plan
(cover page to remain the same)

City of Detroit, Comprehensive Plan
Section VI: Transportation Element

The following text is presented to replace the City's current Transportation Element.

Note: A referenced and incorporated document to be used in assessing transportation needs is the Public Infrastructure Design Standards Manual Guidelines for Development, effective May 2009, or its most recent update.

The City's Comprehensive Plan was initially prepared and accepted in 1978 with some partial updates adopted in the year 2002. As part of the City's preparation of its first Transportation System Plan (TSP), an amended Transportation Element was adopted in 2009. The amendment included information related to the City's transportation system and established goals/policies to implement the TSP. The TSP document was incorporated into the Plan to supplement and provide additional analysis to support the implementing standards and regulations of the City's Development Code.

The study area for the TSP consisted of the entire Detroit UGB which is consistent with the existing City limits. Land developments and the supportive transportation system in the Detroit urban area have been heavily influenced by the location of State Highway 22 (also referenced as OR 22 and the Santiam Highway) and Detroit Lake. Highway 22 generally runs northwest to southeast through the community and forms the backbone of much of the local transportation system. Highway 22 provides regional connectivity for Detroit, linking it to Salem in the Willamette Valley and Bend in Central Oregon, as well as, other nearby communities.

Preparation of the Detroit TSP began with an inventory and assessment of the existing transportation system. Transportation system characteristics that were identified and reviewed focused on the existing street system including roadway features, intersection geometry, and bridge conditions. Analyses were made of existing transportation operations and crash histories at key intersections. Assessments of other transportation-related functions included an assessment of, and ideas for improvements to bicycle and pedestrian infrastructure, as well as public transportation, rail, and air systems.

The City of Detroit system inventory served as the basic framework for evaluation of existing needs and deficiencies and provided a foundation for assessment of future transportation facility needs.

Transportation Planning Rule. As applicable to the City of Detroit, the Oregon Transportation Planning Rule (TPR) requires local jurisdictions to develop a Transportation System Plan (TSP) to accommodate future travel demand resulting from adopted land uses. The plan must accommodate all travel modes in use within the City, be consistent with the Oregon

Transportation Plan (OTP), and coordinated with federal, State, and local agencies and various transportation providers.

In compliance with the TPR, the City's TSP assessed existing facilities for their adequacy and deficiencies, developed and evaluates system alternatives needed to accommodate land uses in the acknowledged comprehensive plan, and adopts local land use regulations to support implementation of the TSP.

Highways: A key element of the City's transportation system is Highway 22 (also referenced as OR 22, Highway #162 and North Santiam Highway), classified as a Statewide Highway. The Highway located within City limits between mileposts 49.73 and 51.16 is under the jurisdiction of the Oregon Department of Transportation (ODOT). According to the 1999 Oregon Highway Plan (OHP), the primary function of Statewide Highways is to "provide inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objective is to provide safe and efficient, high-speed, continuous-flow operation. In constrained and urban areas, interruptions to flow should be minimal." (Note: the reference to "high speed" is not applicable to the portions of the Statewide Highways located with City limits.) Highway 22 is a major route through the City and although Detroit has no direct control over the State Highway, adjacent development and local traffic patterns are heavily influenced by the Highway. Oregon Department of Transportation standards govern State highways including improvement standards, geometrics, access spacing and permitting, and policies.

Additional designations are assigned to Highway 22. From its intersection with Breitenbush Road to the south City limits, Highway 22 is part of the West Cascades National Scenic Byway. The "Freight Moves the Oregon Economy" ODOT publication notes that the Highway is part of both the National and State Freight Systems.

A measure of roadway congestion (volume to capacity (v/c) ratio) is calculated by dividing the number of vehicles passing through a section of highway during the peak hour by capacity of the section. The 1999 OHP (reaffirmed in 2006) notes the minimum standards of acceptable operation/performance measure for Highway 22: v/c ratio as equal to or less than 0.70 (speeds at 45 or greater miles per hour) and .75 (speeds of over 35 miles per hour).

In regards to the Highway's traffic volume and using the 2007 Transportation Volume Tables, the average daily trip (ADT) for Highway 22 is 4,200 and ODOT's Future Volume Tables project ADTs of 4,800 for the year 2027. (In 2007 volumes ranged from 64 percent (December) to 156 percent of the Average Daily Traffic.) Marion County Rural Transportation System plan indicated in 2005 a range of between 3,000 and 3,900 average daily trips and projects to the year 2025 that the daily trips could increase to between 5,000 and 5,900.

Breitenbush Road, entering the City at the northeast corner and terminating at its intersection with Highway 22, is under the jurisdiction of the United States (US) Forest Service (FS). The Road is also known as FS 46 and Detroit Estacada Highway. This Highway is part of the West

Cascades National Scenic ByWay. With the exception of Front Street N that parallels Highway 22, no City streets connect to FS 46.

Marion County Roadways. There are no public rights-of-way within the City of Detroit's Urban Growth Boundary that are under the jurisdiction of Marion County.

Streets under the City's jurisdiction. Identification of the roadway functions is the basis for planning roadway improvements and the appropriate standards (right-of-way, improvement width, and design speed) that the City applies to each roadway facility under the category of local streets. The Transportation System Plan identifies and defines several levels of street classifications: highways, urban collector streets, neighborhood collector streets, and local streets. A street classification map identifies roadways as assigned. See **Functional Roadway Classification Map, Transportation Element, Map 1**. The City also has one right-of-way designated as alley and several private roads under the jurisdiction of the US Forest Service and others under private ownership.

Pedestrian/Bicycle Paths/Trails. None of the streets within City limits under the City's jurisdiction have sidewalks. Establishing through the adoption of the City's TSP street classifications and street profiles, rights-of-way widths, and potentially Public Works Standards provides better guidance for when walkways and bike paths are provided and including the type and the mechanisms to fund the improvements. The planning process and changes to the implementing ordinances also require consideration of other paths/trails planned within the region. See **Adopted Bicycle and Pedestrian System Map, Transportation Element, Map 2**, for the City's planned network of paths and trails. Development of the non-vehicular routes requires coordination with federal, State, and other area agencies. Examples include connections to other communities in the North Santiam Canyon and between numerous communities (including the Canyon Journeys project) and Forest Service/State Park facilities (existing and planned). For more specific details on the agencies and trail/path locations, see the City's TSP.

Public Transportation (local/regional bus, school bus, railroad, and air travel options). Opportunities for public transportation within the City of Detroit are extremely limited. Lack of alternate modes of travel may be interpreted as an inconvenience to some residents of the community. However, the limited service creates a significant disadvantage for individuals who are underage to drive, physically unable operate a motor vehicle, or cannot financially manage the ownership/operation of a dependable vehicle. Chemeketa Area Regional Transportation System (CARTS) operated by Salem Area Mass Transit District (also known as Cherriots) provides bus service to communities along the Highway 22 corridor (Santiam Region) three times per week-day with connections to routes inside an outside the Salem-Keizer area. The closest CARTS connection for Detroit residents is within the City of Gates, approximately 17 miles to the east. Schedule information is available on-line: www.cherriots.org by checking the details for CARTS.

Cherriots contracts with Trip Link—a call center with a network of 20 to 25 transportation providers. Trip Link arranges throughout the State of Oregon rides to medical appointments for individuals who qualify for Medicaid. (Eligibility for Medicaid is determined by the person's case worker.)

One bus company headquartered in the City of Newberg provides an Oregon Coast to Bend route that makes a round trip once a day. An individual can arrange a ride based upon a 24-hour notification schedule. The closest passenger rail services are located in the City of Salem (Amtrak). For the closest air travel, passenger terminals are located in the City of Bend and the City of Portland. The airport (McNary Field) located in Salem does offer freight services.

Elementary and high school students living in Detroit are transported to facilities located in the City of Gates (elementary education) and Mills City (secondary education). North Santiam Canyon School District 129-J contracts with a private company for transportation services. There are four locations where students gather. Only one location has a bus shelter (informal). Lack of adequate shelters and concerns for the safety of students crossing Highway 22 are noted in the City's TSP.

Sensitive Lands. Planning for transportation facilities in Detroit also needs to include evaluation of environmental and wildlife habitat areas/designations within City limits. Other sections of the City's Comprehensive Plan identify the specific areas needing protection and/or preservation. The TSP process also generated additional information relative to potential slope hazard areas in the northwest and east sections of the City. Used during development review, the City's Development Code provides through current or newly adopted and applicable ordinances/standards methods to lessen any potential impacts.

Funding. Resources for funding transportation facilities outside the development process are extremely limited. The City repeatedly discovers during the yearly budgeting process that expenditures to make improvements far exceed the revenue. Completing the TSP planning process explores options for outside or additional funding sources and recommendations for prioritizing projects. See the City's TSP, Chapter 7—Funding and Financing, for additional details.

Area coordination. The City of Detroit has the opportunity to coordinate and cooperate with other federal, State, County, regional, and non-profit organizations in creating trails and paths for both pedestrians and bicyclists. Examples of planning efforts are as follow:

West Cascades National Scenic Byway. Based upon a document prepared for the Willamette and Mt. Hood National Forests, Segment 2 (McKenzie-Santiam) of the West Cascades National Scenic ByWay (designated in the year 2000) incorporates Breitenbush Highway (FS 46). It continues south on Highway 22 through the City of Detroit. The mission of the ByWay is to provide "a scenic alternative to driving Interstate 5 . . . provides the visitor with exciting opportunities to experience breath-taking views of mountain landscapes, explore wilderness, fish wild and scenic rivers, camp and recreate among old growth timber stands, enjoy the rural charm of foothill communities and to participate in the many unique events and festivals available along the route."

Canyon Journeys. A document prepared for the North Santiam Canyon Economic Development Corporation (NSCEDC) surveys the North Santiam Canyon beginning 30 miles east of the City

of Salem (Lyons) and continues to Detroit and Idanha. “The concept of a canyon-wide trail system to provide a safer non-motorized travel alternative to State Highway 22 has been explored many times. . . As envisioned, the trail would connect the Canyon’s communities to each other and with the areas’ outstanding natural, recreational and cultural features.” The study continues indicating that “once fully developed, the Canyons Journeys Alternative Transportation Link trail system (Canyon Journeys) will consist of a system of biking, hiking and equestrian trails that connect communities in the Highway 22 corridor. . . The portion affecting the City of Detroit falls into the categories of the second and third groups to be completed: Mongold Park to Detroit (Forest Avenue) (2nd section) and Forest Avenue to Blowout Road (3rd section). Options may include connections on the north and/or south sides of Detroit Lake.

A proposal in the study includes a “water taxi” for overall visitor circulation at Detroit Lake that could provide “connections between the visitor facilities and camping areas on the north and south side of Detroit Lake with the City of Detroit. An additional segment of the water taxi system could be added to connect the Hoover Campground and boat dock to the system. This addition to the water taxi system would provide a unique ‘trail’ experience that would link Detroit to the western end of the Idanha trail system.”

(In conjunction with the Canyons Journeys project the Forest Service is also considering a trail with use of power line right-of-way from its facility west of the City of Detroit that would extend to the City. Crossing the Brietenbush River needs resolution in regard to either using the existing bridge, incorporating a crossing into a Highway 22 bridge replacement, or creating a separate river crossing. The Forest Service indicates the possibility of completing the trail within the next ten (10) years.)

Goals and Policies. Goals and policies for the City’s Comprehensive Plan, Transportation Element, are adopted based upon information collected and evaluated during the preparation of the City’s Transportation System Plan. Goals and Policies guide the City’s planning efforts related to its systems serving vehicular, pedestrian, bicycle, and public transportation and their routes within the community.

GOALS:

The following goals guide the City’s Transportation Element and are used to monitor future transportation strategies and improvements.

- Quality of Life: Enhance the City’s quality of life by providing adequate access to residences, employment, services, and social/recreational opportunities.
- Land Use Planning: Integrate land use and transportation planning.
- Congestion: Operate transportation facilities at a level of service that is cost-effective and appropriate to the area served.
- Connectivity: Create an interconnected transportation system to support existing and proposed land uses.
- Access: Meet the access needs of land development while protecting public safety needs, transportation operations, and mobility of all transportation modes and cooperate with the Oregon Department of Transportation where applicable. Include any requirements for Highway 22

specific to its classification within the National and State Freight System and Highway 22/Breitenbush Road being within a National Scenic ByWay.

- Transportation Balance: Provide a balanced transportation system that includes options for meeting the travel needs of all modes of transportation.
- Energy: Minimize transportation-related energy consumption by using energy-efficient and appropriate modes of transportation for movement of people, goods, and services.
- Economic: Promote economic health and diversity through the efficient and effective movement of goods, services, and people.
- Environmental: Minimize environmental impacts on natural resources when constructing transportation facilities and encourage non-polluting transportation alternatives.
- Pollution Control: Minimize pollution including air, water, and noise pollution.
- Parking: Provide adequate parking without conflicting with other transportation goals.
- Coordination: Collaborate and coordinate with state, county, regional, and other agencies during long-range planning efforts, development review, design and construction of transportation projects, and any other land use or transportation programs/policies development.

The following policies guide the City's implementing ordinances related to transportation system planning.

POLICIES:

(1) Protection of Transportation Facilities:

- (a) Recognize ODOT's control of Highway 22, including access management and the need to comply with requirements according to applicable sections of the Oregon Administrative Rules, the Oregon Highway Plan, and the Highway Design Manual.
- (b) Protect the function of existing and planned transportation systems as identified on the City's Functional Classification Street Map and consider other TSP identified pedestrian/bicycle paths and public transportation through application of appropriate land use and access management regulations;
- (c) When making a land use decision, consider the impact on the existing and planned transportation facilities;
- (d) Although consideration to vacate public rights-of-way is discouraged, consider the potential to establish or maintain bikeways or walkways prior to vacating public easements or rights-of-way;
- (e) At the time of land development or land division, require conveyance of land for dedication as additional right-of-way or the granting of easements in order to obtain adequate street widths, bikeways, and walkways to accommodate transportation facilities. (The conveyance of land or granting of an easement shall be in accordance with all street plans, pedestrian/bicycle plans, trails, and public transportation adopted plans.);
- (f) At the time of new development, require access primarily from local streets. (Driveway access onto highways and streets classified as collectors shall be evaluated based upon access options, street classifications, and the effect of the new access on the function, operation, and safety surrounding street intersections.); and

(g) Prevent land development from encroaching into setbacks required for potential street expansion.

(2) Street Classifications:

(a) Highways: Highway 22 and Breitenbush Road

(b) **Urban Collector Streets.**

- West side of Highway 22:
 - Detroit Avenue N from Highway 22 to Forest Avenue W,
 - “D” Street from Detroit Avenue N to Patton Road N,
 - Detroit Avenue S from Forest Avenue W to Santiam Avenue W,
 - Patton Road N from south of its intersection with “D” Street to Forest Avenue W,
 - Patton Road S from Forest Avenue W to Santiam Avenue W, and
 - Santiam Avenue W from Patton Road S to Highway 22.

(c) **Neighborhood collector streets.**

- East Side of Highway 22:
 - Forest Avenue E to Butte Street N to Kinney Avenue E,
 - Forest Avenue E to Butte Street S to Scott Avenue S to Lake Street E to Meyer Street S to Hill Street S,
 - Guy Moore Drive from Highway 22 north to Osprey Lane,
 - Meyer Street S from Lake Street E to Highway 22, and
 - Hill Street S from Lake Street E to Highway 22

(d) Local Streets: All other public streets within the community are classified as Local Streets. The majority of local streets provide access to single-family residents.

(3) Layout and Design of Streets and Pedestrian/Bicycle paths/trails:

- (a) Designate streets to efficiently and safely accommodate emergency service vehicles;
- (b) Designate streets, pedestrian/bicycle paths/trails to meet the needs of pedestrians and cyclists to promote safe and convenient bicycle and pedestrian circulation within the community;
- (c) Promote bicycling and walking for all new development on highways and collector streets, and require sidewalks plus a category of bicycle lanes;
- (d) Require for all local streets sidewalks or a level of walkway as approved by the City Engineer;
- (e) Provide for major activity centers including public buildings/uses, downtown businesses, parks, and businesses with a larger number of employees, direct and convenient access for motor vehicles, public transportation, bicycles, and pedestrians;
- (f) At the time of development, interconnect streets to reduce travel distance, encourage efficient lot layout, promote alternative travel modes, provide efficient utilities and emergency services, and provide even dispersal of traffic. (Cul-de-sacs or City Engineer and Fire District approved turn-arounds are allowed only when topographical, environmental, or existing adjacent land uses make connecting streets infeasible. Where cul-de-sacs are planned, multi-use paths connecting the end of the cul-de-sac to other streets or neighborhood activity centers shall be provided, if feasible.);
- (g) Include within the design of streets used by school buses and other potential public transportation services pedestrian paths and shelters/amenities as funding allows;

- (h) Require that street design address topography and minimize impacts on other natural resources such as streams, wetlands, slopes, and wildlife corridors/habitats;
 - (i) Where appropriate, utilize a street system and its infrastructure as an opportunity to convey and treat stormwater runoff;
 - (j) Provide consideration of the beautification of entrances to the City, and in particular between Highway 22 and its intersections with Breitenbush Highway, Detroit Avenue, Forest Avenue, and Hill Street S/Guy Moore Drive.
- (4) Maintenance:
- (a) Conduct maintenance and repair of existing roadways and future bikeways/walkways (including sidewalks) on a proportional basis that is prioritized through the budgeting process, except in emergencies.
- (5) Parking
- (a) Provide on-site motor vehicle parking for all new development unless on-street parking or nearby sites provide adequate parking for the proposed use or the property is within downtown commercial areas where the City allows credit for providing on-street parking or financially contributing toward the development of a public parking area;
 - (b) Provide appropriate bicycle parking facilities at all new commercial, industrial, recreational, and institutional facilities and at new residential multi-family developments for four (4) or more units. (Bicycle parking facilities shall be no farther from the facility entrance than the closest automobile parking (except handicapped spaces). Consideration may be given for centralized bicycle parking areas within the downtown commercial area. Fees payable to City may be considered/established for “in lieu of” providing the on-site spaces.)
- (6) Public Transportation
- (a) Support the provision of basic mobility service for the elderly and individuals with special transportation needs;
 - (b) Work with Salem Area Mass Transit District to expand transit services closer to the Detroit area;
 - (c) Encourage demand management programs such as park-and-ride facilities and vanpools to reduce single-occupancy and auto trips traveling east and west of the City.
- (7) Coordination
- (a) Notify ODOT and the United States Forest Service of all projects proposals and development applications adjacent to State and Forest Service highways; and
 - (b) Notify Marion County Sheriff’s Department, Marion County Public Works Department, Idanha-Detroit Fire District, and North Santiam School District 129-J of proposed changes to the Transportation System Plan.
- (8) Transportation system problems/opportunities including potential changes/improvements as raised and/or discussed during the preparation of the City’s Transportation System Plan:
- (a) Upgrade the sidewalk and include a bicycle path on the Highway 22 bridge at the time of either widening or replacement;

- (b) Study the Breitenbush Highway and Highway 22 intersection in regards to the number of conflicting travel lanes and lack of identified pedestrian/bicycle crossing at this intersection with the potential of incorporating the 2nd Street right-of-way (a local street);
- (c) Consider reconfiguration of the entrance to the City on the northwest side of town by designing an exit-only onto Detroit Avenue N from Highway 22 (south bound traffic);
- (d) Consider the installation of curbing on Detroit Avenue N between Highway 22 and “D” Street and along the north side of “D” Street including a method to better define property access on the south side of “D” Street (between Detroit Avenue N and Patton Road N);
- (e) Consider creating a bike lane through the City of Detroit that exits Highway 22 on Detroit Avenue N; travels and south on Detroit Avenue; allows reconnection to the Highway at Forest Avenue W, Santiam Avenue W, or further south; and provides access to the Detroit Flats day use area;
- (f) Enhance the Forest Avenue E and W/Highway 22 crosswalk (pedestrian crossing between the residential area on the east side and the commercial businesses/recreational activities on the west side of the highway) with elements that may include better street lighting, installation of noticeable signage to identify the crosswalk, and/or the construction of a center median that separates travel lanes/creates a refuge in the middle of the highway *;
- (g) Consider creating a public parking area for vehicles, motorcycles, and bicycles on City-owned property west of the intersection of Patton Roads N and S and Forest Avenue W (former elementary school site);
- (h) Consider identifying potential areas for semi-trailer truck parking;
- (i) Consider areas for the storage of snow (such as the former elementary school site) generated due to clearing the Highway and local streets during the winter months;
- (j) Determine a method to provide pedestrian/bicycle route to Detroit Lake on the west side of the City and including a defined pathway on Clester Road;
- (k) Consider methods to improve the safety at the Hill Street S/Guy Moore Drive intersection with Highway 22 such as reducing the speed limit to less than 45 miles per hour, creating better sight distance, adding a turn lane, or eliminating the intersection (use of Meyer Street as an alternative);
- (l) Incorporate the results of a 2008 City-requested ODOT conducted speed study upon its completion;
- (m) Provide upgraded/uniform street signage within the City and including directional designations (N/S and E/W);
- (n) Provide street signage identifying the emergency evacuation routes within the community;
- (o) Consider the impact of slopes greater than 20 percent and 30 percent within new development and including improvements to existing streets or constructing new streets and including requirements for geotechnical studies; and
- (p) Consider elements of other regional plans in the review of future development or redevelopment to allow connections to planned trails/pathways/walkways/bikeways.

* Please note: For letter (f), the City and ODOT may be able to incorporate Front Street right-of-way the highway needs widening.

MAP Updates Include: STREET NETWORK AND FUNCTIONAL CLASSIFICATONS MAP AND BICYCLE AND PEDESTRIAN PLAN MAP

Comprehensive Plan – VI. Transportation Element (1978)

~~**GOAL:** Provide for those types of transportation opportunities that are compatible with the environmental, social and economic objectives of the community.~~

~~The principal mode of transportation used by the residents of Detroit is the automobile. The travel distance from the city to major retail and service centers increases the reliance on the automobile. Other factors effecting automobile usage are infrequent bus service to the area and a lack of housing. The lack of housing forces employees to commute from other cities to their place of employment in Detroit.~~

~~The State of Oregon recently approved funding of a bikeway from Mongold State Park to the City of Detroit. When development of the bikeway is complete, it would be advantageous to the city to continue it, wherever possible, throughout the city. This bikeway would provide local residents and tourists the opportunity for many miles of enjoyable riding without a problem of bicycle motor vehicle conflicts. The Citizens Committee adopted a policy to encourage city involvement that states:~~

~~————— *Encourage bikeway development to continue from the state bikeway connecting the city and Mongold State Park.*~~

~~The Marion County Housing Authority provides a seniors bus to some cities for qualified senior citizens. The nearest city to Detroit that is served on a scheduled basis is Mill City. Those seniors without the advantage of being able to drive their own automobile must rely on whatever means available to them to travel to Mill City in order to ride the Housing Authority bus. If funds become available in the 1978-79 funding year, the Housing Authority will include Detroit on its regular schedule. If this does occur the Citizens Committee would:~~

- ~~● *Encourage eligible senior citizens to use the Marion County Housing Authority bus.*~~

~~With the physical size of Detroit's commercial center being somewhat compact, a pedestrian would be able to traverse the entire area rather easily. It would be advantageous to encourage walkways in the commercial area to create an attractive business climate. The policy accepted by the Citizens Committee addressing pedestrian movement reads:~~

~~————— *Walkways should be provided to minimize pedestrian/vehicular conflicts.*~~

Streets

~~Street conditions vary in the city from unimproved rights-of-way to paved travel lanes. Approximately 50 percent of the city's streets consist of gravel surface. With the amount of rainfall received in this area, these streets require much more maintenance than if they were paved.~~

~~In 1976, the city filed an EDA application for local public works funds to improve local streets. The application was denied, but from this process it was identified that there was a need for \$250,000 to improve all the city's streets. If the city is to pursue the goal of improving all streets located within its boundary, it must either receive federal or state funding and/or prioritize streets for improvement as local funds become available. The Citizens Committee has adopted the following policies to aid in developing a street improvement program:~~

- ~~● *The City should strive to pave existing unimproved streets and maintain existing streets.*~~

- ~~● Alternative funding sources should be investigated by the city.~~
- ~~● Minimum standards for street improvements should be established.~~
- ~~● Future subdivisions shall be required to install underground utility service lines.~~
- ~~● Full development to approved street standards will be required of all new subdivisions.~~

VII: PUBLIC FACILITIES ELEMENT
Detroit Comprehensive Plan
(cover page to remain the same)

The keys to providing adequate public facilities include advanced planning and operating the installed system efficiently. Such keys guided the City to the following goal:

To provide for logical orderly development of public facilities and services.

Note: A referenced and incorporated document to be used in assessing public infrastructure elements and needs is the Public Infrastructure Design Standards Manual Guidelines for Development, effective May 2009, or its most recent update.

Sewer

The City of Detroit currently has no community wastewater collection and disposal system. The City uses on-site septic systems to dispose of wastewater. There is very little known about the conditions of these systems, but it is suspected that because of their age and changing regulations many existing systems do not meet current Oregon Department of Environmental Quality (DEQ) specifications. Current standards require that there be sufficient lot area for complete replacement drainfield system in the event of failure of the primary drainfield. DEQ regulations do not allow development over or modification of replacement drainfields in any way, thus demanding large lots for residences.

The City must overcome other constraints to the installation of a community sewage collection and treatment facility. One of these is in the form of statewide water quality guidelines controlling discharge of treated sewage into rivers and lakes. Volume I of the Statewide Water Quality Management Plan, Section III, Subsection D, states:

In order to preserve the existing high quality water for municipal water supplies and recreation, it is the policy of the **Environmental Quality Commission** (EQC) to prohibit any further waste discharges to the waters of the North Santiam River Subbasin above the City of Stayton.

In a letter dated October 18, 1993, DEQ stated “. . . our Department strongly supports the phase out of individual septic tanks systems and the replacement with a community system adequately sized and designed to serve the urban needs of the City of Detroit and the recreational needs of the area surrounding Detroit Lake.”

Future development of the community, particularly industrial and commercial facilities, is virtually impossible under the existing scenario. The Upper North Santiam River Canyon Sewage Treatment Feasibility Study, completed in October 1996, ~~has been~~ **was** adopted as a facilities plan for a regional wastewater treatment facility that ~~will serve~~ **was planned to serve** the City of Detroit, the City of Idanha, US Forest Services facilities, and Oregon State Park facilities in the area. Financing the public sewer system is beyond the capability of the City and its residents. Financing assistance from other sources ~~is~~ **would be** necessary for completion of ~~the a~~ public sewer system.

For the City of Detroit to have new development beyond that allowed by the septic system, a sewage collection and treatment facility must be constructed. The cost of such a system is currently prohibitive for the City with its existing small population base to finance alone. ~~Loan and grant funds must be available to develop a public sewer system.~~ **Although the Cities obtained other funding sources, there**

was not sufficient financing to continue planning the public system. At the January 11, 2005, meeting, the Detroit City Council decided to abandon the Detroit/Idanha sewer project. A letter sent February 2, 2005, informed the City of Idanha of the Detroit's Council decision. Based upon secured and reserved funds, the City of Idanha continued planning for an alternate system for the community. Again, based upon the higher costs to its residents, Idanha ended its efforts to pursue a publically operated system on January 26, 2009, and formally deobligated the funds.

~~The City of Detroit and the City of Idanha have each received several grants and loans from both State and federal sources for wastewater improvements. The Cities will use the grant money to design and construct facilities to collect and transmit wastewater from Idanha to Detroit and facilities to collect and transfer Idanha's and Detroit's sewerage to the treatment facility planned for placement on US Forest Service land. The State Parks and US Forest Service will build their own collection and transmission systems. All four entities will each pay their share for the cost to construct the treatment facility.~~

~~Placing the wastewater treatment facility on the US Forest Service land in rural Marion County required a Goal Exception for a zone change and a Marion County Comprehensive Plan amendment to change the zoning of the property from Timber Conservation to Public, and amend the Comprehensive Plan from Forest to Public. The Cities of Idanha and Detroit, and the Oregon State Parks and US Forest Service received approval from Marion County on 24 June 1998 for a conditional use to place their wastewater treatment facility outside of City limits.~~

~~As of Spring 2001, the wastewater facility is in the design and engineering phase of development. Construction is scheduled to begin in the Summer of 2002. The project is planned to be completed in Spring 2003.~~

Water

A municipal water system provides service to the residents of Detroit. According to the 20-year Master Plan 1997-2017, there ~~are~~ **were** approximately 250 active unmetered sites during the winter and 360 sites in the summer. Because of large, seasonal fluctuations in population, the summer demand for water is substantially higher.

The City of Detroit holds rights to 0.25 cubic feet per second (cfs) from Mackey Creek, a tributary of the North Santiam River, and 1.00 cfs from Breitenbush River. Mackey Creek has provided water to the city since October 1957. The Breitenbush River was developed as a water source in 1963 to supplement Mackey Creek during low-flow summer months.

The city uses a slow sand filter, constructed in 1990, to treat its water. The filter, with a design capacity of 250 gallons per minutes (GPM), discharges into a reinforced roofed concrete reservoir with a capacity of 205,000 gallons.

The 20-year Master Plan 1997-2017 identified several major deficiencies in Detroit's water system. First, Breitenbush River intake system, constructed in 1966, needs major repairs to the pump, wet well and supply piping. In addition, much of the distribution system piping is of small diameter (4 inches or less) or deteriorating. Many leaks are possibly present. One of the recommendations from the master plan was to meter all services so that the city could detect leaks and deficiencies. Another problem caused by small diameter pipes, is that it is not possible to provide adequate capacity for fire flows.

~~When the North Canyon sewer system goes on-line in 2003, more development in Detroit will become possible, and with that, development will create increasing demands on the city's water system. In the 1997 water master plan, the estimated costs for all recommended improvements to the system totaled~~

\$767,897.00. Should adequate financing become available, the improvements will be completed on or before 2017.

In the fall of 2008, the city adopted an updated Water System Master Plan. The October 2008 Water System Master Plan is referenced and incorporated as a supplemental document of the Comprehensive Plan and is used in the review of development proposals.

**Public Facilities Element
Goals and Policies**

Goal: The City of Detroit shall provide for logical orderly development of public facilities and services.

Policies:

Sewer

~~1. The city should continue to seek funding from grant sources for a complete sewer system.~~

≧ **1.** The city should promote development at the highest density allowed by septic systems.

Water

3. The city shall implement the improvements to the water system recommended by the 20-Year Master Water Plan **or it most recent** update as financing becomes available.