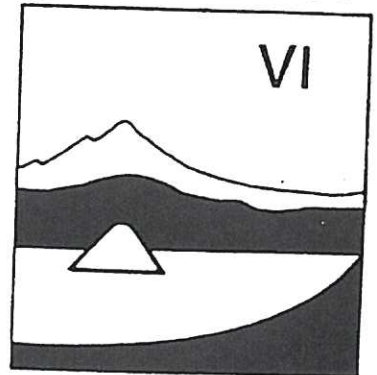


TRANSPORTATION  
ELEMENT



Detroit  
comprehensive plan

## VI: 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 Roadway Functional 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 the City's Public Infrastructure Design Standards provide 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/Pedestrian System Map, Transportation Element, Map 2, for the City's and other jurisdictions' 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 and 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](http://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 Redmond 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. During the review of land divisions and planned developments, 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) (2<sup>nd</sup> section) and Forest Avenue to Blowout Road (3<sup>rd</sup> 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 2<sup>nd</sup> 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);

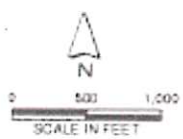
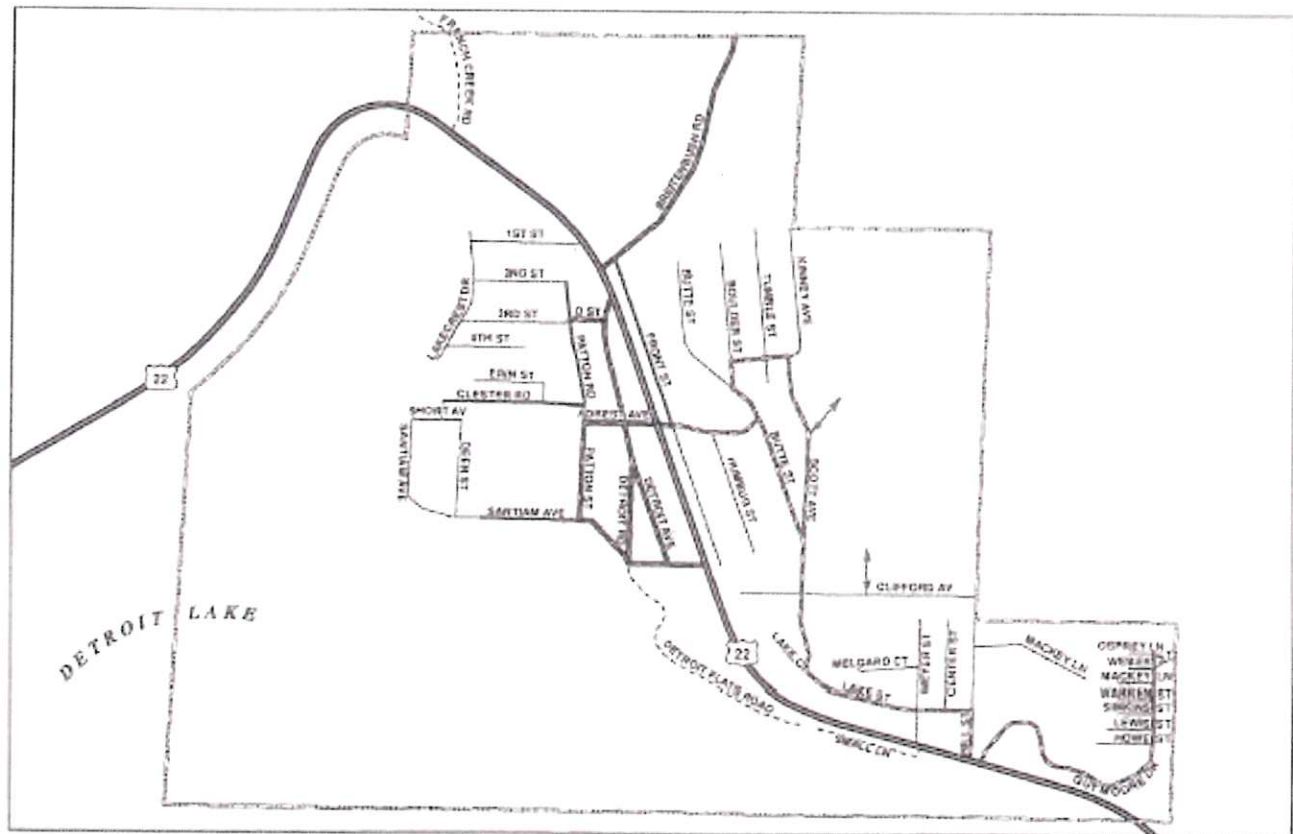
- (e) Consider creating a bike lane through the City of Detroit that exits Highway 22 on Detroit Avenue N; travels and south on Detroit Avenue; allows reconnection to the Highway at Forest Avenue W, Santiam Avenue W, or further south; and provides access to the Detroit Flats day use area;
- (e) Enhance 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 \*;
- (f) 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);
- (g) Consider identifying potential areas for semi-trailer truck parking;
- (h) 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;
- (i) 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;
- (j) 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);
- (k) Incorporate the results of a 2008 City-requested ODOT conducted speed study upon its completion;



- (l) Provide upgraded/uniform street signage within the City and including directional designations (N/S and E/W);
- (m) Provide street signage identifying the emergency evacuation routes within the community;
- (n) 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
- (o) 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 when the highway needs widening.

**ROADWAY FUNCTIONAL CLASSIFICATION MAP  
TRANSPORTATION ELEMENT  
MAP 1**



- |  |                            |                   |
|--|----------------------------|-------------------|
| Highway                                      | Local Street with Walkway  | City Boundary/UGB |
| Urban Collector                              | Local Street with Shoulder | Trail             |
| Neighborhood Collector                       | Private                    | Water Body        |
| Future Local Street with Walkway Connections |                            |                   |

**Roadway Functional Classifications**  
Detroit, Oregon

# BICYCLE/PEDESTRIAN SYSTEM MAP TRANSPORTATION ELEMENT MAP 2

