City of Lake Oswego

Lake Grove Village Center Plan
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2024 Vision Statement

The Lake Grove Village Center vision statement embodies the shared values and aspirations of the community. The vision statement was authored by the Lake Grove Village Center Implementation Advisory Committee and is based on input received from Lake Oswego residents, businesses and property owners at community workshops. The process of developing the vision included the creation of a list of desired characteristics for all aspects of the Village Center. This list of desired characteristics formed the basis for the Goals and Policies of the Lake Grove Village Center Plan.

Lake Grove Village Center – A Community Vision for 2024

The Lake Grove Village Center is a welcoming, comfortable community nucleus for the daily activities of the residents of Lake Oswego’s west end (see Figure 1 – Village Center Boundary). The village of Lake Grove quietly celebrates its natural surroundings and rural beginnings. These rural independent roots are reflected in a diverse mix of tasteful architectural styles that allow old and new development to blend compatibly. The two major Boones Ferry Road entry points to the Village Center area are clearly marked by decorative monuments or gateways that embody the distinct character of Lake Grove. This character has been shaped by a respect for and preservation of the natural resources of the area, particularly the groves of native trees and restoration of natural water courses. There is a sense of place where harmony exists between these natural elements and those elements of development that provide opportunities for commerce, service, civic, social, cultural and related activities for the people who live and work in and near the Village Center.

The Village Center includes a lively community of local businesses, surrounded by neighbors and employees who use these businesses. Decision makers have considered the economic impact of their decisions on local business, leading to an economically viable business core where locally owned, independent businesses are encouraged to flourish. Property owners, business owners and residents have worked together to maintain and enhance the village character of Lake Grove, preserving and highlighting historical features, activities and businesses. Some residential development has been incorporated into the predominantly small business core, driven by market demand and government incentives rather than governmental regulation, providing a range of housing options. Public uses, including an elementary school, a community center, and a library facility are located within the Village Center and serve west end residents, business owners and employees. A village commons within the Mercantile Village area and a series of smaller community gathering places comprise a “string of pearls” which provide important focal points in the Village Center (see Figure 9 – Village Commons, Gathering Places and Gateways Map). Community members have worked with the City of Lake Oswego and other government agencies to ensure that public uses serve the community and heighten Lake Grove’s sense of identity.
The Village Center is connected to the surrounding neighborhoods, employment areas, downtown Lake Oswego and other adjacent centers through a variety of safe, convenient and viable transportation options, including walking, cycling, public transit and auto travel. The major transportation artery, Boones Ferry Road, has been calmed by various traffic management tools including: sidewalks, safe pedestrian crossings, bike lanes, landscaped medians, allowing ease of access to and from commercial areas and neighborhoods and safe crossings of Boones Ferry Road. Pedestrians, cyclists and vehicle traffic all move at a safe, smooth pace in this revamped corridor. Public parking for vehicles, both on and off street, is provided in convenient locations within the Village Center. These parking areas allow for ease of access to retail, restaurant and other neighborhood services without encroaching on the surrounding residential neighborhoods. Street trees, pedestrian-scale lighting, consistent public signage, landscaped medians with pedestrian refuges, public transit shelters and other streetscape elements within the Village Center reinforce the neighborly character of the area.

Adjacent residential neighborhoods and public parks and open spaces within close proximity are directly linked to the Village Center by safe sidewalks, pathways and bike paths to encourage walking and non-vehicular travel. The transition between the more intensive development along Boones Ferry Road to the less intensive development at the edges of the Village Center is done by subtly stepping down the height, scale and intensity of development along the cross streets. This stepping down of development helps to bring the Village Center and neighborhoods together rather than creating an abrupt demarcation between the two.

By the year 2024, the Lake Grove Village Center has thoughtfully evolved into a pedestrian-friendly neighborhood community. It has an enterprising and hospitable character that reflects the people who live and work within and around it. The Lake Grove Village Center is a place where nature and human activity are well connected and prosperously coexist.
Planning Process

In 1999, the Lake Oswego Comprehensive Plan was amended to designate the Lake Grove area as a Town Center consistent with the Metro 2040 Plan. In 2001, the Boones Ferry Road Corridor Plan was prepared by the City but never formally adopted.

Planning and public involvement for the Lake Grove Town Center began in September, 2002, and culminated with the development of the Lake Grove Town Center (LGTC) Plan Report in July, 2003. Throughout the process, several well attended community open houses and a multi-day design charrette were held to identify issues and test concepts. The LGTC Plan Report provided a summary of issues and concepts for integrating land use and transportation in the center. When completed, the LGTC Plan Report served as a source document for and bridge to the follow up implementation planning process.

In October 2003, a twelve-member citizen advisory committee, chaired by a member of the Planning Commission, was appointed by the Lake Oswego City Council to assist the Planning Commission in the development of an implementation plan consistent with the project’s adopted Guiding Principles and the City’s Comprehensive Plan. As the Advisory Committee began its work on refining the vision, the group recommended a name change from Lake Grove Town Center to Lake Grove Village Center which they felt more accurately reflected the scale and character of development envisioned for Lake Grove. Between October 2003 and June 2005, the Advisory Committee has met monthly, or in some cases weekly, to refine the vision for the Village Center and to develop implementation measures to achieve the vision. In addition, the Advisory Committee met twice per month from September 2005 through April 2006 to develop and refine draft development code language to implement the plan with additional meetings occurring during the summer.

In the summer 2006, the City of Lake Oswego applied to have the Plan and Code adopted by the Lake Oswego City Council. An Open House was held in September prior to the start of public hearings before the Planning Commission in October 2006. Throughout their deliberations, the Planning Commission sought to strengthen plan and code provisions to meet long-term community needs, balance various interests and concerns raised in public testimony, and to restructure the documents to better conform to the formats of the Comprehensive Plan and Community Development Code. The Planning Commission made an effort to preserve, to the greatest extent possible, the carefully balanced consensus reached by the Advisory Committee.

Public hearings before the City Council began in February, 2008. The Plan was adopted in April, 2008.

Throughout the planning process, the Planning Commission guided the work of consultants, staff and citizens in their efforts to create a visionary yet realistic Plan to guide future development in Lake Grove. Many of those involved came to appreciate the delicate balancing act required to integrate and coordinate the diverse interests of the many stakeholders involved in the effort.
Document Organization

The Lake Grove Village Center Plan contains the following sections:

- Transportation
- Land Use
- Natural Resources
- Economic Development

Each section of the plan is organized as follows:

**Background** – Background information includes a summary of existing conditions, issues, and fundamental concepts.

**Goals and Policies** – The goal and policy statements are intended to capture land use, transportation, urban design, natural resource protection and parking concepts embodied in the Vision Statement. Goals are general statements indicating a desired end. Policies state what must be done to achieve a desired end by identifying the City’s position and a definitive course of action. The City must follow relevant policy statements when amending the Comprehensive Plan, or developing other plans or ordinances which affect land use. The goals and policies of the Lake Grove Village Center Plan are highly interrelated and work together to guide the achievement of the plan vision. Implementation of any one policy must be evaluated in terms of the effect on other plan policies and the Vision Statement.

Lake Grove Village Center Plan Goals and Policies are organized under the four sections as follows:

I. TRANSPORTATION
   - Goal 1: Transform Boones Ferry into a Great Street
   - Goal 2: Enhance Alternative Modes of Travel
   - Goal 3: Enhance the Pedestrian Environment and Connectivity

II. LAND USE
    - Goal 4: Encourage a Mix of Uses Within the Village Center
    - Goal 5: Strengthen the Lake Grove Sense of Place and Community
    - Goal 6: Enhance Village Character
    - Goal 7: Protect the Residential Character of Adjoining Neighborhoods

III. NATURAL RESOURCES
    - Goal 8: Protect Natural Resources and Enhance the Natural Environment within the Village Center

IV. ECONOMIC DEVELOPMENT
    - Goal 9: Support Businesses in the Village Center
    - Goal 10: Identify and Implement Funding Mechanisms to Sustain Economic Vitality

**Action Measures** – Action Measures are statements outlining projects or standards which, if executed, implement goals and policies. The completion of these items will depend on a number of factors such as citizen priorities, finances, staff availability, etc. These statements provide guidance on how to implement the goals and policies including the identification and design of specific projects.
Background

Town Center Planning

Metro’s 2040 Urban Growth Management Functional Plan identifies town centers and main streets throughout the Portland metropolitan region. Lake Grove area is one of two designated “town centers” in Lake Oswego and Boones Ferry Road is a designated “main street.” Town centers may serve tens of thousands of people, where good transit services, a pedestrian environment, shopping, services, entertainment and higher density housing are encouraged. Each town center in the region is unique, with distinct identities and boundaries, along with a strong sense of community. Some centers date from the early 1900s, while other more recent centers emerged outside of established locations to serve the growing region. Town centers are the central focus of community life for people who live within two or three miles. They provide basic retail services and gathering places for those who wish to walk to shops and parks. Locating many town centers throughout the region provides opportunities for people to run errands closer to home or work, and reduces the need to drive longer distances.
Lake Grove Development Pattern

Current Comprehensive Plan policies and code provisions emphasize separating the General Commercial zone from adjacent low-density residential neighborhoods. Businesses of all sizes and types are subject to significant setbacks adjacent to any residential zone. Over time, these provisions create a sort of Village Center “wall” and an identity for Lake Grove based on commercial uses along Boones Ferry Road and an auto-oriented character. Issues related to current conditions, particularly on Boones Ferry Road, include safety, substandard sidewalks and pedestrian crossings, lack of bicycle lanes, and the impacts of unevenly spaced private driveway approaches on mobility, safety and convenient access.

The Lake Grove development pattern is shown in this aerial photograph of Boones Ferry Road looking southwest from north of Reese Road and Oakridge Road. Photo Credit: Aaron Shell Productions, 2006.
Concept Plan

The Lake Grove Village Center Concept Plan illustrated in Figure 2 identifies key concepts integrating land use, transportation and urban design elements:

- **Boones Ferry Road as a Great Street**
  Providing green medians with safe pedestrian crossings will provide identity to the district and create a catalyst for other improvements. The concept for Boones Ferry Road promotes a safe, welcoming and convenient pedestrian and bicycle friendly environment, where auto traffic is accommodated efficiently and safely and the needs of successful businesses are met.

- **A Mixed Use Center with Linkages to Neighborhoods**
  A fundamental concept of the Plan is “to bring the Village Center and neighborhoods together”. Residential neighborhoods are integrated with the commercial center by encouraging mixed uses within the Village Center. Cross-streets (e.g. Lanewood, Reese-Oakridge, Bryant-Firwood) are planned for a high level of pedestrian oriented character, mixed use, and transition between Boones Ferry and the adjacent neighborhoods.

- **Village Commons, Gathering Places and Gateways**
  The design concept features a linear series of public spaces and focal points with a larger Village Commons and gateway features. Gathering places are linked visually and geographically by enhanced pedestrian routes. Gathering places feature hardscape and greenscape elements.
Figure 2: Lake Grove Village Center Concept Plan

Village Commons and Gathering Places

- Village Commons
  - Community events
  - Incorporates natural features
  - Location to be determined

- Gathering Places
  - Lanewood Street
  - Lake Grove School Drive Area
  - Post Office at Oakridge
  - Between Oakridge and Quarry
  - Wizer’s/Bank of America site
  - Lake Grove Fire District site

Gateway

- Enhanced Multi-use Pathway
- Hallmark Festival Street
- Enhanced Pedestrian Streets

Boones Ferry Road

Great Street Concept

- Enhanced Sidewalks/Street scape, Bike Lanes, Transit Facilities

Landscaped Medians
- Access Control
- Stormwater Management
- Pedi/bike Crossing Refuge

Signalized Crossings/Turn Lanes
3 New Signal Locations:
  - Lanewood
  - Between Reese & Bryant Roads
  - Between Bryant Road and Madrona

Pedestrian Crossings

Mixed Use Center with Linkages to Neighborhoods

- Neighborhood Pedestrian/Bicycle Connection
- Commercial Mixed-Use Transition Area
- Residential Neighborhood (outside Village Center)
- Commercial Mixed-Use District

Public Parking Facilities
- Serve north, central and south areas
- Locations to be determined
I. TRANSPORTATION

Existing Conditions

Street Network - The primary roadways serving the Village Center are Boones Ferry Road and Kruse Way. Both are classified as “Major Arterials” within the City and provide access to downtown Lake Oswego and Interstate 5. Circulation to and within the Village Center is supported by a network of collector and local streets (see Functional Street Classifications Map, Figure 18, Transportation System Plan, Lake Oswego Comprehensive Plan).

The current average right-of-way width in the Boones Ferry corridor is 71 feet, with a minimum width of 54 feet and a maximum width of approximately 87 feet. The speed limit is 30 mph through the Village Center. There is a “school zone” located in the vicinity of the Lake Grove School with a reduced speed of 20 mph on school days between 7:00 am and 5:00 pm. There are four signalized intersections on Boones Ferry Road in the Village Center at Kruse Way, Mercantile Drive, Oakridge/Reese Road, and Bryant/Firwood Roads, resulting in spacing between pedestrian crosswalks of over 1,000 feet long on average, and as long as 1,400 feet in some locations. The remainder of the intersections and access points along Boones Ferry Road are currently stop-controlled on the minor street approaches.

Boones Ferry Road Street Classification - Boones Ferry Road south of Country Club Road is designated as a major arterial. Major arterials are characterized by three to five travel lanes, speed limits between 25 and 45 miles per hour, with restricted access from adjacent land uses, generally prohibited on-street parking, bike lanes, sidewalks, and traffic volumes of 20,000+. The City’s Transportation System Plan recommends a 100-foot right-of-way for a major arterial, including 8-foot wide sidewalks with 4.5-foot wide pedestrian buffers on each side of the roadway, two 6-foot wide bike lanes, four 12-foot wide travel lanes, and a 14-foot wide center raised median or left turn lane.

Special Street Setback - The City Code (LOC 50.22.035) currently specifies a special street setback of 50 feet from the centerline of Boones Ferry Road between Mercantile Drive and Madrona Avenue, potentially resulting in a 100-foot right-of-way adjacent to redeveloped properties. The special street setback is intended to preserve an obstruction-free area along public rights-of-way in anticipation of future street improvements, such as additional lanes, pedestrian and bicycle facilities, transit facilities, drainage management improvements, lighting, and street landscaping.

Safety - During a 40-month period, a total of 140 crashes were reported along Boones Ferry Road.\(^1\) While these numbers indicate crash rates lower than comparable state averages, they are among the highest crash rates within Lake Oswego. Given crash rates, traffic volumes and concerns over speeding, safety is a primary issue for residents, business owners, and city officials along Boones Ferry Road.

Existing Traffic Operations - Average daily trips on Boones Ferry Road between Bryant and Kruse way are estimated between 25,000 and 28,000 trips based on traffic counts recorded between 2001

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\(^1\) Crash numbers are based on ODOT data summarizing reported accidents between January 1, 1997 and June 30, 2000 in the Boones Ferry Road Corridor Plan (Kittelson, 2001). Reported crashes typically under-estimate the total number of crashes that have actually occurred due to the fact that minor accidents are not always reported to local agencies.

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and 2006. All signalized study intersections currently operate at acceptable levels of service during the average weekday a.m. and p.m. peak hour. At the minor street approach at unsignalized intersections at Red Cedar Way/Boones Ferry Road and Lanewood Street/Boones Ferry Road, intersections were found to operate with relatively long delays, resulting in level of service “F” during the peak period. However, Boones Ferry road turning and through movements operate at acceptable levels and there is sufficient capacity at these intersections to accommodate existing traffic demand. Traffic signal warrants had not been met at these locations based on 2001 data and signal warrant analysis.

Travel Demand Patterns - An origin-destination demand study indicated that approximately 47-percent of the traffic traveling within the SW Boones Ferry Road study corridor can be classified as “through” traffic (i.e., trips that do not have a final or intermediate destination within the study corridor). It can be assumed that the remaining 53-percent have at least one final or intermediate destination within the study corridor. A proportion of these 53-percent “local trips” do have a final destination outside of the immediate study area, however, they do make at least one stop (at one of the local businesses and/or neighborhoods) as they travel along SW Boones Ferry Road.

Corridor Access Configuration - The existing access configuration along the SW Boones Ferry Road study corridor consists of over 50 unevenly spaced private driveway approaches. The large number of varying access approaches, in conjunction with growing traffic volumes along the corridor, impacts the overall mobility and operational safety of the corridor, making access to and from facilities and adjacent land uses difficult, reducing the potential roadway capacity, and impeding operations of traffic. The frequent, poorly delineated, and inconsistent access spacing along the corridor also provides increased opportunity for conflicts with pedestrians and bicyclists.

Pedestrian Connections and Streetscape - Within the Village Center, sidewalks currently exist along portions of Boones Ferry Road but not along the full extent. Over half of the existing sidewalk facilities do not meet minimum width standards. The existing pedestrian environment along the length of the corridor suffers from non-standardized treatment. For example, some portions of the sidewalk tilt toward the street with no buffer between the pedestrian path and vehicle traffic. In other areas, the pedestrian path is obstructed with utility poles and/or trees. In addition, many driveways and access points along the corridor create potential pedestrian-vehicle conflict points. Elsewhere in the study area, sidewalks are provided sporadically along certain collector and local streets that comprise the remainder of the existing transportation system. As on Boones Ferry Road, the existing pedestrian environment along these roadways suffers from non-standardized treatment and lacks connectivity.

Bike Facilities - Field observations conducted during the first phase of the project within the study area revealed low levels of bicycle activity along the study roadways with little supporting infrastructure provided. Designated bicycle lanes are provided on Boones Ferry Road both to the north and south of the study area but there are no lanes between Mercantile Drive and Madrona Street. Kruse Way provides an off-street shared pedestrian/bicycle pathway along its north side. No other designated bicycle lanes are provided within the study area. The City’s Transportation System Plan calls for arterials and major collectors to provide exclusive bicycle facilities or accommodations for bicycles on-street. As traffic volumes increase on these roadways, on-street striped bicycle lanes, multi-use pathways and designated shared roadways will help to maintain the safety and comfort of bicyclists on the system and promote the increase use of cycling as a viable mode of transportation. In addition, there was vocal support through the Village Center planning process to enhance and
facilitate bicycle travel throughout the study area via the development of a connected bicycle system network and the provision of bicycle amenities.

Transit - Within the study area, TriMet currently operates Route 37: Lake Grove between the downtown Lake Oswego Transit Center and the Tualatin Park and Ride via Country Club Road and Boones Ferry Road through the Village Center. The Route 38: Boones Ferry Road operates along Kruse Way at the north end of the Village Center, traveling from Portland to Tualatin. One other route, Route 36: South Shore, operates in the general vicinity of the study area.

Issues Summary

- Safety is a primary concern among residents, business owners, and city officials with crash rates for Boones Ferry Road within the Village Center among the highest in the City.
- Approximately 47-percent of the traffic traveling within the SW Boones Ferry Road study corridor can be classified as “through” traffic with the remaining 53-percent having at least one final or intermediate destination within the study corridor.
- The large number of over 50 unevenly spaced private driveway approaches, in conjunction with growing traffic volumes along the corridor, impacts the overall mobility and operational safety of the corridor, making access to and from facilities and adjacent land uses difficult, reducing the potential roadway capacity, and impeding operations of traffic. The frequent, poorly delineated, and inconsistent access spacing also provides increased opportunity for conflicts with pedestrians and bicyclists.
- Existing sidewalks and crossings do not provide a continuous network of direct, safe and convenient walking routes. A buffer between pedestrians and vehicular traffic is absent for the majority of frontage along Boones Ferry Road.
- On-street striped bicycle lanes designated in the City’s Transportation Systems Plan on Boones Ferry Road are provided along one segment (between Kruse Way and Mercantile Drive). In the remaining segments of the corridor, vehicles and bicycles share the roadway.
- The convenience and ease of using the current bus service is diminished by unprotected transit stops with an average spacing of approximately 1,200 feet rather than the recommended 750 feet apart, and by headways in excess of recommended 15 to 30 minute intervals.
- Boones Ferry Road could be a much more attractive environment for people who live, work and visit the Village Center.
- Glare from street lights and unnecessary spill light impact the natural character of the dark night sky.
Transportation Concept

A variety of safe, convenient and viable transportation options, including walking, cycling, public transit and auto and truck travel, are envisioned to connect the Village Center to the surrounding neighborhoods, employment areas, downtown Lake Oswego and other adjacent centers. Traffic management and urban design concepts are developed to calm traffic on Boones Ferry Road, allowing ease of access to and from commercial areas and neighborhoods and safe crossings of Boones Ferry Road. Convenient and visible public parking, both on and off street, is planned to provide for ease of access to retail, restaurants, neighborhood services, and the village commons and gathering places without encroaching on the surrounding residential neighborhoods. Shared parking and access agreements are encouraged to provide for greater flexibility and more efficient use of private parking areas.

Boones Ferry Concept

The goal for Boones Ferry Road is to create an attractive street that serves as the centerpiece of the Lake Grove area. Integrated land use and transportation strategies are recommended to promote a safe, welcoming and convenient pedestrian- and bicycle-friendly environment, while accommodating auto traffic efficiently and meeting the needs of businesses by providing adequate vehicle access and sufficient parking.

Recommended transportation concepts for Boones Ferry Road were identified by the Lake Grove Village Center Advisory Committee in the 2005 Boones Ferry Concept Plan. The Boones Ferry Concept Plan provides the basis for policies, projects and design direction for improvements to Boones Ferry Road in the Village Center. During the first phase of the Lake Grove Village Center Planning process (in 2002 and 2003), the 2001 Boones Ferry Road Corridor Plan (Exhibit F-15.4) became the basis for land use plans. Concerns were raised by stakeholders over the challenge of trying to integrate the recommended five-lane arterial and continuous center lane with the vision of a pedestrian friendly, mixed use Village Center. At the request of the Lake Grove Village Center Advisory Committee, the City Council authorized a new study to revisit specific elements of the 2001 Corridor Plan resulting the 2005 Boones Ferry Concept Plan.

Safety

Safety for all is a paramount concern. Boones Ferry Concept recommendations include reducing posted and effective speed. A key element of the transportation concept is landscaped center medians recommended to enhance safety for pedestrians, bicyclists and vehicles. Center medians enhance safety by providing:

- Access control and the reduction or elimination of vehicle turning movement conflicts with pedestrians, bicyclists and other vehicles; and
- Pedestrian and bicycle refuges at intersections and mid-block crossings. The Boones Ferry Concept introduces new pedestrian crossings as development levels and pedestrian demands warrant for an average spacing between crossings of about 360 feet.

Landscaped medians also provide opportunities for stormwater management, or “green streets,” and attractive landscaping to enhance the quality and identity of the Lake Grove area.
Access to Businesses

Safe, convenient access to commercial sites requires an integrated approach employing a variety of design strategies in concert with center medians to maximize benefits to Boones Ferry Road businesses. Design elements may include:

- Direct access from signalized locations and cross-streets;
- Through connections between adjacent parking facilities;
- Drive consolidation and shared access;
- Raised center medians to manage turn movements and improve traffic flow; and where needed
- U-turns at selected intersections controlled by phased traffic signals to provide access to businesses that cannot otherwise be accessed from cross streets or driveways.

**Goal 1: Transform Boones Ferry into a Great Street**

Create an attractive street that promotes a safe, welcoming and convenient environment for pedestrians, bicyclists and vehicles, accommodates auto traffic efficiently, provides adequate vehicle access to meet the needs of businesses, and manages stormwater within the right-of-way.

**Policies:**

1.1 Utilize engineering and urban design strategies to improve access to and from businesses in the corridor, and calm traffic on Boones Ferry Road.
1.2 Provide landscaped center medians along Boones Ferry Road to organize access, enhance safety, manage storm water and to beautify the corridor.
1.3 Employ green street concepts in Boones Ferry Road improvements where practicable. Consider Boones Ferry Road’s function as a significant water conveyance system within an urban watershed. Integrate storm water system improvements for watershed health including water quality, habitat, and tree canopy coverage.
1.4 Provide continuous sidewalks and bike lanes to enhance safety along Boones Ferry Road.
1.5 Provide pedestrian crossings at regular intervals. Consider signalization of pedestrian crossings in design refinement studies.

**Goal 2: Enhance Alternative Modes of Travel**

Promote the safe and convenient use of public transit service and bicycling within, to and from the Village Center.

**Policies:**

2.1 Create enhanced public transit service between the Village Center and surrounding areas (e.g. bus, shuttle bus, trolley, commuter rail). In partnership with TriMet, design and construct bus shelters along Boones Ferry Road and Kruse Way.
2.2 Provide a range of safe bicycling options, including, but not limited to, on-street bike lanes on Boones Ferry Road (and major collectors, as appropriate), a marked neighborhood bike route around the Village Center and secure bicycle parking.
Goal 3: Enhance the Pedestrian Environment and Connectivity

Enhance the safety, convenience and attractiveness of walking, transit and bicycling within, to and from the Village Center including safe crossings on Boones Ferry Road and cross streets.

Policies:

3.1 Encourage the orientation of building entrances to pedestrian and transit streets, walkways and public areas, with parking in the rear or at the side.

3.2 Provide continuous sidewalks, pedestrian refuges, landscaped medians, consolidated driveways, crosswalks, signals at crosswalks, public restrooms, and attractive transit shelters. Replace overhead utilities with under-ground utilities.

3.3 Emphasize pedestrian amenities on cross streets to the neighborhoods to strengthen connections to the Village Center. Augment the non-grid system of streets with additional off-street pedestrian and bike pathways to provide safe and convenient connections for all ages.

3.4 Encourage safe pedestrian connections between businesses and parking areas and connectivity between businesses on each side of Boones Ferry Road. Pedestrian arcades, covered walkways and other design features are encouraged to connect uses in a safe and convenient manner.

Action Measures – Transportation

Transportation action measures are organized under five headings:

i. Village Center Access Management Plan

ii. Street Design

iii. Public Involvement

iv. Transportation Projects

v. Design Direction

i. Village Center Access Management Plan.

A comprehensive access management plan for the Village Center shall be completed prior to initiating Engineering Plans (see ii. Street Design, b. Engineering Plans). The access management plan shall provide first, the Traffic and Safety Analysis followed by the Economic Impacts Analysis identified below. These analyses require consideration of impacts for a base case condition based on existing conditions and standards, and for a Village Center condition based on transportation concepts identified in these Action Measures under v. Design Direction. Both analyses require recommendations for alternative design refinements to mitigate findings for adverse impacts and to advance the goals and policies of the Lake Grove Village Center Plan.

   a. Traffic and Safety Analysis. (Policies 1.1; 1.2; 1.5) Complete a traffic operations and safety analysis to address potential impacts to traffic operations, business access, neighborhood “cut-
through” traffic, and safety. Peak hour and non-peak hour assessments should be included. The traffic and safety analysis shall include, but not be limited to, the following:

(1) Address impacts of delivery trucks and delivery truck access routes on traffic flow and pedestrian safety. The potential use of the outer travel lane on Boones Ferry Road for delivery parking during certain limited times is noted in Transportation Action Measure (v)(7) Delivery Truck Access. Address optimal times for parking/delivery activity on Boones Ferry Road, including ruling out use of the outer travel lane for delivery truck parking if indicated.

(2) Address impacts of large passenger vehicle u-turns. The recommended signalized intersection street section for Boones Ferry Road would allow most passenger vehicles to make the u-turns (see Transportation Action Measure (v)(1) Street Cross Sections). Address impacts on traffic flow and safety if several larger passenger vehicle models would not be able to make a simple u-turn within the recommended clear area.

(3) Address impacts associated with right-hand turning movements as cars wait for a car exiting a driveway, or for a car to slow down enough to make a right turn into a driveway. Pedestrian traffic along the sidewalk could also cause occasional delays for these right-hand turning movements.

(4) Analyze the potential “bottleneck” during peak travel times at locations where cars queuing for u-turns or left-turns at an intersection may back up for a significant distance, possibly creating difficulty for those traveling in the opposite direction (on the other side of the same median) who wish to queue and make a u-turn into the travel lanes where the aforementioned queue has developed. Address the case, for example, of a northbound car intending to make a u-turn at the Reese Road intersection and travel south to access a mid-block business (i.e. Ricardo's Restaurant). If the southbound queue is long and traffic heavy, northbound traffic intending to make a southbound u-turn at Reese may back up behind other southbound traffic and block the flow of vehicles intending to make the u-turn at Reese Road.

(5) Address safety and traffic flow impacts for pedestrian crossings that are not located at signalized intersections (see Transportation Action Measure (v)(4) Pedestrian Crossings).

(6) Provide recommendations for conceptual design refinements to mitigate for traffic operations and safety impacts, and to advance the goals of the Lake Grove Village Center Plan. In the event of a conflict between the various goals of the Plan, design refinements for mitigation shall give priority to pedestrian facilities.

b. Economic Impacts Analysis. (Policies 1.1; 1.2) Complete an economic impacts analysis incorporating findings and recommendations from the Traffic and Safety Analysis. The economic impacts analysis shall include, but not be limited to, the following:

(1) Address potential economic impacts to Lake Grove businesses including impacts to parking supply, business access, commercial deliveries, and business performance during street construction. Include an assessment of economic impacts on adjacent neighborhoods.

(2) Provide recommendations for conceptual design refinements to mitigate for economic impacts, and to advance the goals of the Lake Grove Village Center Plan. In the event of a conflict between the various goals of the Plan, design refinements for mitigation shall give priority to pedestrian facilities.
ii. Street Design.

a. Green Streets. (Policy 1.3) Fund and complete a detailed stormwater management and engineering feasibility study to fully assess issues and costs associated with incorporating green streets elements into the design and engineering of Boones Ferry Road. This is a high priority study, particularly given that incorporation of green street concepts is a major element of the overall roadway design. Investigate a variety of funding sources for the study including funds allocated through the City of Lake Oswego Capital Improvement Plan (CIP), Metro “green street” funds, city storm water management funds and federal funds.

b. Boones Ferry Corridor Engineering Plans. (Policies 1.1; 1.2; 1.3; 1.4; 1.5; 2.1; 2.2; 3.2; 3.3; 3.4. See also Transportation Project 1: Boones Ferry Corridor Improvements.) Fund and complete the following engineering plans after the Access Management Plan and any design refinements have been completed:

   (1) 35% Engineering Plan – The 35% engineering plan identifies constructability issues, necessary right-of-way acquisitions, and establishes the framework for the final design, such as grade, slope, sub-base of road and undergrounding of utilities. The 35% engineering plan includes the following:
       - Evaluation of centerline alignment to balance engineering and safety needs with reduction of impacts to adjacent properties, where technically feasible;
       - Assessment and design for mitigation of specific economic impacts to adjacent properties including impacts to existing buildings, parking supply, access, delivery access, and business operations during street construction; and
       - Preparation of preliminary cost estimates.

   (2) 65% Engineering Plan - The 65% engineering plan provides sufficient design information to allow the City to provide a private developer with preliminary plans that form the basis for the completion of detailed engineering plans for a segment of the roadway adjacent to a proposed development.

iii. Public Involvement.

a. Provide timely, complete notice and endeavor to receive meaningful public input prior to making decisions for the planning, analysis, design, and construction of transportation improvements.

b. Invite and consider input from design, engineering and economic analysis professionals and the public, particularly Lake Grove community stakeholders including residents, institutional and business representatives, and commercial property owners for the planning and analysis, design, and construction of transportation improvements.

c. Ensure that the public remains informed by effectively publicizing and making available documentation of processes, products and recommendations related to the traffic and safety analysis, economic impacts analysis, street design studies, and engineering plans.
iv. Transportation Projects

Implement Lake Grove Village Center Transportation Projects identified in Table 1 below and on the Maps below (pages 20 – 24) in accordance with design direction provided in Transportation Action Measure v:

Figure 3 – Street Improvements
Figure 4 – Pedestrian Facilities
Figure 5 – Bike Facilities
Figure 6 – Transit Facilities
Figure 7 – Parking Facilities and Access Coordination Map

<table>
<thead>
<tr>
<th>TABLE 1: LAKE GROVE VILLAGE CENTER TRANSPORTATION PROJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Description</td>
</tr>
<tr>
<td>Boones Ferry Road between Kruse Way and Madrona Street</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Mercantile Intersection</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Lanewood Intersection</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Reese-Oakridge Intersection</td>
</tr>
<tr>
<td>Between Reese and Bryant</td>
</tr>
<tr>
<td>Bryant-Firwood Intersection</td>
</tr>
<tr>
<td>Between Bryant and Madrona</td>
</tr>
<tr>
<td>Hallmark Drive between Mercantile Drive and Douglas Way</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Figure 4: Pedestrian Facilities Map²

<table>
<thead>
<tr>
<th>On Street Pedestrian Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kruse Way between Daniel Way/Mercantile Drive &amp; Boones Ferry Road</td>
</tr>
<tr>
<td>Boones Ferry Road between Kruse Way Place &amp; Mercantile Drive</td>
</tr>
<tr>
<td>Galewood/Quarry along curve at west end</td>
</tr>
<tr>
<td>Mercantile Drive complete west/south side and all of east/north side</td>
</tr>
<tr>
<td>Douglas Way both sides at commercial zone</td>
</tr>
<tr>
<td>Douglas Way west of commercial zones</td>
</tr>
</tbody>
</table>

² See Project 1, Boones Ferry Road Corridor Improvements for pedestrian facilities on Boones Ferry Road.
<table>
<thead>
<tr>
<th>Location Description</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On Street Pedestrian Improvements (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Lanewood Street north and south to complete at commercial zone</td>
<td>Urban Curb &amp; Gutter</td>
<td>Medium</td>
</tr>
<tr>
<td>14a Quarry Road north of Oakridge</td>
<td>Residential (meandering) Path</td>
<td>Medium</td>
</tr>
<tr>
<td>14b Quarry Road south of Oakridge</td>
<td>Urban Curb &amp; Gutter</td>
<td>Medium</td>
</tr>
<tr>
<td>15 Oakridge Road west of Quarry north &amp; south</td>
<td>Residential (meandering) Path</td>
<td>Low</td>
</tr>
<tr>
<td>16 Oakridge Road east of Quarry north &amp; south</td>
<td>Urban Curb &amp; Gutter</td>
<td>Medium</td>
</tr>
<tr>
<td>17 Reese Road west side at commercial zone</td>
<td>Urban Curb &amp; Gutter</td>
<td>Medium</td>
</tr>
<tr>
<td>18a Lake Grove Avenue north side at commercial zone</td>
<td>Urban Curb &amp; Gutter</td>
<td>Low</td>
</tr>
<tr>
<td>18b Lake Grove Avenue north side a R-0 zone</td>
<td>Residential (meandering) Path</td>
<td>Low</td>
</tr>
<tr>
<td>19a Bryant Road</td>
<td>Urban Curb &amp; Gutter</td>
<td>High</td>
</tr>
<tr>
<td>19b Bryant Road</td>
<td>Residential (meandering) Path</td>
<td>Medium</td>
</tr>
<tr>
<td>20 Madrona north/east side</td>
<td>Urban Curb &amp; Gutter</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Off Street Pedestrian Improvements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 North/South between Lake Grove Ave. &amp; Lanewood St.</td>
<td>Pathway</td>
<td>Medium</td>
</tr>
<tr>
<td>22 Kruse Way to Galewood</td>
<td>Pathway</td>
<td>Low</td>
</tr>
<tr>
<td>23 Harvey Way to Mercantile Drive</td>
<td>Pathway</td>
<td>Low</td>
</tr>
<tr>
<td>24 Collins Way to Hallmark Drive</td>
<td>Pathway</td>
<td>Low</td>
</tr>
<tr>
<td>25 Douglas Way to School Driveway</td>
<td>Pathway</td>
<td>Medium</td>
</tr>
<tr>
<td>26 Lake Grove Elementary – Douglas Way to Boones Ferry</td>
<td>Pathway</td>
<td>Medium</td>
</tr>
<tr>
<td>27 Lake Grove Ave to Boones Ferry</td>
<td>Pathway</td>
<td>Low</td>
</tr>
<tr>
<td>28 Oak Ridge Rd to Boones Ferry</td>
<td>Pathway</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Figure 5: Bike Facilities Map**

<table>
<thead>
<tr>
<th>Location Description</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 Boones Ferry Road</td>
<td>Bike Lanes</td>
<td>High</td>
</tr>
<tr>
<td>31 Quarry Road</td>
<td>Bike Ways</td>
<td>Low</td>
</tr>
<tr>
<td>32 Bryant Road</td>
<td>Bike Ways</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Figure 6: Transit Facilities Map**

<table>
<thead>
<tr>
<th>Location Description</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 Boones Ferry Road</td>
<td>Five new bus shelters</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Figure 7: Parking Facilities and Access Coordination Map**

<table>
<thead>
<tr>
<th>Location Description</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 Distribute public parking lots/facilities and related access within each of the three parking service areas: North, Central and South</td>
<td>Public parking lots/facilities and related access</td>
<td>High</td>
</tr>
</tbody>
</table>
Special District Plan:
Lake Grove Village Center Plan
Lake Grove Village Center Plan

Pedestrian Facilities Map

- Proposed On-Street Sidewalk Improvement with urban curb & gutter - Existing condition inadequate
- Proposed On-Street Sidewalk Improvement with urban curb & gutter - Existing sidewalk may be subject to Improvement under Lake Grove Village Center standards
- Proposed On-Street Improvement, meandering, separated path - Existing condition inadequate
- Proposed On-Street Improvement, meandering, separated path - Existing pathway may be subject to Improvement under Lake Grove Village Center standards
- Multi-use Pathway - bicycles one direction each side of Knaps Way between Mercantile Drive/Daniel Way and Boones Ferry Road
- Proposed Pedestrian Pathway, Off Street
- Village Gateway Streetscape & Enhanced Pedestrian/Bicycle Facilities
- Proposed Pedestrian Crossing
- Gathering Place (see Community Projects 4 to 9, Table 3)

Figure 4
Special District Plan:
Lake Grove Village Center Plan

Lake Grove Village Center Plan
Parking Facilities and Access Coordination Map

Project Number: See Table 1: Transportation Projects, Parking Facilities and Access Coordination

Access Coordination Area: Coordinated access to be provided by establishing shared access and shared parking between parking areas within each Access Coordination Area, while minimizing direct access to Boones Ferry Road at unsignalized locations.

Public Parking Lot/Facility Service Area: Public parking facilities and related access to be provided within each of the three service areas

Legend:
- Existing Signal
- Proposed Signal
- Proposed Pedestrian Crossing
- Landscaped Medians
- Village Center Boundary

Figure 7

EXHIBIT B - Ord. 2454
Design Direction is organized as follows:

a. Boones Ferry Corridor Improvements\(^3\)
   (1) Street Cross-Sections
   (2) Streetscape
   (3) Pedestrian Crossings
   (4) Sustainable Street Design / Green Streets
   (5) Traffic Speed
   (6) Delivery Truck Access
   (7) Operational Analysis
   (8) Traffic Signal Management
   (9) Intersections
   (10) Parking Facilities and Access Coordination
   (11) Street Lights and Utilities

b. Kruse Way

c. Village Cross-Streets

d. Hallmark Festival Street

e. Pedestrian Connections

f. Bicycle Facilities

g. Transit

h. Phasing and Timeline

\(^3\) The Design Direction subsection includes concepts identified in the 2005 Boones Ferry Concept Plan.
Consult the following when implementing Lake Grove Village Center Transportation Projects:

a. Boones Ferry Corridor Improvements

Boones Ferry Corridor improvements are identified and prioritized in Street Improvements, Table 1, Lake Grove Village Center Transportation Projects. Project locations are shown on Figure 3, Street Improvements Map.

(1) Street Cross Sections

Design Boones Ferry Road to enhance safety, organize access, encourage all modes of travel, manage storm water, and beautify the corridor. An 82 foot right-of-way is recommended unless additional width is required to facilitate traffic movements (see below, (b) Required Right-of-Way, Revising Recommended Right-of-Way). Sidewalks are required to be a minimum of nine feet in width within the Boones Ferry Road right-of-way including area for tree wells or landscaped planter and street furnishings. Landscaped planter should be designed to optimize stormwater management (see (4) Sustainable Street Design/Green Streets in this section).

The recommended design concept for Boones Ferry Road is shown in Cross-Sections 1 & 2 below. Street elements include:

- Four travel lanes (two travel lanes in each direction);
- Landscaped center medians;
- Bike lanes on both sides of the street;
- Sidewalks including tree wells or landscaped planter on both sides of the street; and
- Left turn lane as shown in Cross-Section 2 at the signalized intersections. The left turn lane requires additional street cross-section width at intersections. The left turn lane, median and phased signal provide for u-turns where required to access commercial sites.
(a) Preferred Modifications - Consider the feasibility of providing the following modifications to the typical cross-section on a case-by-case basis:

**On-Street Parking.** Allow on-street parking on Boones Ferry Road on a case-by-case basis where desired by adjacent property owners or where available right-of-way would make it feasible, ensuring that vision clearance from adjacent driveways is not impeded.

**Sidewalk Easements.** Increase sidewalk width on adjacent private property by using sidewalk easements and development incentives such as an allowance of counting sidewalk area on private property towards landscaping requirements. By retaining the land as private property rather than giving it up as right-of-way, the property owner can count the area as part of lot size when calculating lot coverage requirements.

(b) Required Right-of-Way

**Revising Recommended Right-of-Way.** An 82 foot right-of-way is recommended to accommodate street elements identified in the Boones Ferry Corridor Street Cross Sections, and is subject to revision based on completion of the following:

- Village Center Access Management Plan. An access management plan for the Village Center is required prior to initiating Engineering Plans including recommendations for alternative design refinements to mitigate for adverse traffic, safety and economic impacts. Additional right-of-way width is required at intersections to accommodate turning movements. (See Transportation Action Measure i. Village Center Access Management Plan, a. Traffic and Safety Analysis; b. Economic Impacts Analysis.)

- Street Design. Street design prior to construction includes a stormwater management and feasibility study followed by Boones Ferry Corridor Engineering Plans. (See Transportation Action Measures ii. Street Design, a. Green Streets; b. Boones Ferry Corridor Engineering Plans.)

**Existing Development Constraints.** Existing development on a number of properties along Boones Ferry Road constrains construction of the recommended street elements identified in the Boones Ferry Corridor Street Cross Sections at locations where existing development, including structures and/or parking, are located within the recommended right-of-way. In these constrained areas, interim roadway design solutions are recommended. Upon redevelopment of a site, full right-of-way width would be dedicated, allowing for sidewalks and/or bike lanes to be widened.
(2) Streetscape

Provide consistent streetscape elements on Boones Ferry Road and Village Center cross-streets to enhance the character of Lake Grove. A design theme (the Lake Grove Village Center theme) to unify streetscape elements within the Village Center is recommended. Action measures to develop and implement the Village Center theme are provided in this Plan for Goals 5 and 6, Subsection iv: Village Character. Streetscape elements include:

- Pedestrian-scale lighting;
- Street furniture/benches;
- Public transit shelters;
- Coordinated paving materials;
- Street trees and hanging baskets;
- Public art;
- Seasonal decorations and event banners;
- Consistent public signage; and
- Gateways.

Sketch Illustration of Boones Ferry Road streetscape concept.
(3) Safe Pedestrian Crossings

Establish consistent, well designed and uniformly spaced crossings to minimize out-of-direction walking to cross Boones Ferry Road. A finer network of pedestrian crossings creates a safer, more convenient pedestrian environment and reduces the tendency for pedestrians to jaywalk or choose not to cross at all. Bicyclists are also permitted to use pedestrian crossings if they are traveling at the same speed as pedestrians.

Existing and proposed crossing locations result in an average spacing of about 360 feet as shown on Figure 3, Street Improvements Map. Seven new pedestrian crossing locations are identified:

- Three new signalized crossings when warranted by future development at Lanewood, between Reese and Bryant, and between Bryant and Madrona;
- Two unsignalized mid-block crossings with a pedestrian refuge south of Reese Road and north of Quarry Road; and
- Two unsignalized crossings at intersections at Red Cedar Way and Madrona to be installed when development levels and pedestrian demands warrant their evaluation.

The recommendation for the unsignalized pedestrian crossings includes the use of safety features such as:

- Proper advanced signage;
- Markings;
- Pedestrian refuges; and
- Innovative warning devices. Raised pedestrian crossings with embedded flashers are recommended as long as raised crossings do not impede potential green street solutions.

Unsignalized pedestrian crossings are safest when heavily used due to increased driver expectation. To ensure pedestrian safety, when development levels and pedestrian demands warrant, evaluate unsignalized crossing locations for:

- Volume and speed;
- Adequate sight distance;
- Gaps in traffic; and
- Signalization warrants.

(4) Sustainable Street Design / Green Streets

Treat stormwater using green streets techniques within the street right of way to improve water quality, minimize the quantity of water piped directly into streams, lakes, and rivers, reduce street temperature, and to make stormwater interception an aesthetic part of the street.

- Identify opportunities to accommodate green streets stormwater management techniques on Boones Ferry Road including street trees and landscaped medians.
- Complete and consult the stormwater management and engineering feasibility study identified as an action measure in ii. Street Design, a. Green Streets to determine green streets solutions for Boones Ferry Road.
- Provide incentives to encourage property owners to use green street solutions for development including driveways and parking lot treatments.
(5) Traffic Speed

Improve safety for all on Boones Ferry road using a package of engineering and urban design techniques to slow vehicles to 25 mph. Speed is the most significant factor related to crash rates and the severity of injuries. Concerns have been voiced that off-peak period speeds on Boones Ferry Road through the Village Center (between Kruse Way and Madrona Street) exceed the existing 30 mph speed limit. Peak period speeds do not appear to be an issue because congestion generally reduces the average speed.

Initiate a request for a reduction of speed to 25 mph through the Village Center and the West Lake Grove Design District, between Kruse Way and Washington Court in conjunction with the implementation of a “package” of street/land use design elements and appropriate geometric and visual transitions to influence speed. Design elements include:

- Synchronization of traffic signals to accommodate platoons of traffic traveling at 25 mph between Kruse Way and Washington Court. Signal synchronization is a priority recommendation.
- Narrowing the actual and perceived width of travel lanes.
- Providing raised pedestrian crossings with embedded flashers as long as raised crossings do not impede potential green street solutions.
- Providing raised intersections only if implemented along the entire length of Boones Ferry Road in the Village Center, not individually.

To slow vehicles entering the Village Center, transition speed zones at the north and south ends of the area are recommended:

- At the north end of the Village Center, a 35 mph hour maximum speed on Boones Ferry Road should be established between Twin Fir Road and Kruse Way Place, and a 30 mph maximum speed between Kruse Way Place and Kruse Way, continuing around the corner to the west on Kruse Way to Carman Drive.
- At the south end of the Village Center, a maximum speed of 30 mph is recommended between Pilkington Road and Washington Court, with a 25 mph maximum speed zone north from Washington Court on Boones Ferry Road.

(6) Delivery Truck Access

Provide clear routes for truck delivery to businesses along Boones Ferry Road. Single unit and tractor-trailer trucks cannot make u-turns at intersections to access commercial sites on the opposite side of the street. Such u-turns are required when sites are not otherwise accessed at signalized locations or by cross streets, shared access drives and shared routes through adjacent parking lots.

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4 Pedestrians hits by a car at 40 mph have a 15% survival rate; at 30 mph a 45% survival rate; and at 20 mph, an 85% survival rate. Source: U.S. Department of Transportation, 2002. (See Exhibit G-2.27, LU 06-0025)

Develop a delivery access strategy for the Village Center to consider:

- Delivery requirements and recommended access routes for commercial sites.
- The need for large vehicles to turn around at either end of Boones Ferry Road in the Village Center to approach their destinations. At the north end of the Village Center, Mercantile Drive (via Kruse Way) provides a public accessway for larger vehicles to turn around. At the south end, a truck turn around route using Pilkington Road and Willow Lane, both in an industrially zoned area, is recommended.
- Outreach to potentially affected property owners.
- Providing business owners with information needed to work with the trucking companies to coordinate and plan delivery routes accordingly. The City will work with business owners to develop maps of truck turn around routes and other materials for use by businesses and delivery companies that serve them.
- Allowing large delivery trucks to temporarily park in the outside lane of Boones Ferry Road, during defined off-peak hours, to make deliveries to adjacent businesses.

(7) Operational Analysis

Account for estimated traffic operations impacts in the planning and design of Boones Ferry Road improvements to ensure appropriate levels of mobility and minimize neighborhood cut-through traffic. An operational analysis of Boones Ferry Road (from Mercantile Drive to Madrona Street) was conducted in 2005 to determine the effect of the Boones Ferry Concept Plan on traffic conditions and indicated intersections functioning at level of service “A” and “B” with the intersection at Bryant operating at level of service “C.”

Level of service is a qualitative scale of intersection function from “A” to “F”:

- Level of service “A” represents a free-flowing intersection, and level of service “F” represents a very congested intersection that may take more than one cycle for a vehicle to pass through.
- Level of service “D” is considered tolerable.
- Level of service “E” is generally acceptable in built-up, downtown areas.
- Current City of Lake Oswego policies direct that the arterial and major collector street network is designed and maintained to level of service “E” at intersections during peak hour periods (Lake Oswego Comprehensive Plan, Goal 12: Transportation, Goal 1, Policy 1).
Accounting for reconstruction of Boones Ferry Road and the installation of new traffic signals and timing plans, the analysis re-optimizes traffic signal timings. The resulting intersection level of service (LOS) is summarized in Table 2, below.

<table>
<thead>
<tr>
<th>Intersection with Boones Ferry</th>
<th>Signalized Intersection Level of Service (LOS)</th>
<th>Average Delay (in seconds)</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercantile</td>
<td></td>
<td>10</td>
<td>B</td>
</tr>
<tr>
<td>Lanewood (new)</td>
<td></td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Reese/Oakridge</td>
<td></td>
<td>12</td>
<td>B</td>
</tr>
<tr>
<td>McDonald’s vicinity (new)</td>
<td></td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Bryant</td>
<td></td>
<td>33</td>
<td>C</td>
</tr>
<tr>
<td>Wizer’s Shopping Center (new)</td>
<td></td>
<td>6</td>
<td>A</td>
</tr>
</tbody>
</table>

Source: Kimley-Horn and Associates using SYNCHO software and HCM 2000 operations methodology. Assumed a cycle length of 100 seconds with optimized side street splits.

(8) Traffic Signal Management

Include traffic signal modification in street improvements and/or redevelopment projects to provide significant operational benefits. Use traffic signal location, timing, coordination, and interconnection to direct the flow of vehicles along the corridor, control vehicular speeds, and provide pedestrians and bicycles with well delineated and protected roadway crossings. Traffic signal management measures include the following:

- Develop timing plans commensurate with desired posted speeds.
- Ensure the safety and operations of proposed u-turn movements.
- During business and school hours, place traffic signals on a pre-timed signal plan to insure regular timing intervals and activate pedestrian walk phases on each signal phase. This type of signal system strategy encourages pedestrian travel and also controls vehicular speeds to an appropriate level.
- During other times, when pedestrians and bicyclists are not as predominant along the corridor, switch traffic signals to pedestrian actuation to better accommodate traffic flow while still providing safe pedestrian/bicycle crossings when needed (weekday a.m. and p.m. peak hour time periods) and consistent, appropriate travel speeds.

(9) Intersections

Lanewood Street

Install a new signal at Lanewood Street and Boones Ferry Road and realign the school access drive, providing four-legged, enhanced crossings on all approaches. This improvement should provide safe and convenient access to the elementary school for pedestrians, as well as efficient egress for vehicles and school buses from the school onto Boones Ferry Road, without impairing the viability of contiguous business property. The design of this intersection should adequately address safety for pedestrians, bicyclists, and vehicles and access to the adjoining commercial property.
Oakridge Road/Reese Road

Provide improvements to the intersection at Oakridge Road/Reese Road. Consider the following to enhance intersection safety and visibility, and to minimize impacts to the right-of-way and existing buildings:

- Realign to provide safer, four-legged pedestrian/bicyclist crossings and more efficient operations.
- Coordinate with on-site Lake Grove Post Office parking, access, and circulation enhancements.
- Determine the feasibility of moving or realigning the intersection to the southwest to minimize impacts to the right-of-way and existing buildings.

Bryant Road/Firwood Road

Provide improvements to the intersection at Bryant Road/Firwood Road. Consider the following to enhance intersection safety and visibility, and to ensure optimum storage lengths for left turn queues:

- Investigate alternatives to extending the storage length for southbound left turn queues on Boones Ferry Road beyond Quarry Road. Operational analysis indicate southbound left turn queues could require storage length extending beyond Quarry Road. However, this would affect the amount of median usable for stormwater management and require eliminating the pedestrian crossing proposed at Quarry Road.
- Existing and potential future congestion at the Boones Ferry Road/Bryant Road intersection, particularly on Bryant Road south of Boones Ferry Road, warrant further study to determine the feasibility of changes in signalization, an additional left turn lane or other long-term solutions.
- Evaluate existing and future operational analyses in terms of assumptions made about future household and employment populations in the Stafford area. Account for new and improved facilities recommended in comprehensive traffic planning efforts to accommodate increased traffic volume generated by growth in the Stafford area.
- Solutions should not adversely impact neighborhood streets.
Intersection Treatments

Design intersection improvements to provide safety for all and to enhance appearance and operations as follows:

- Coordinate style, color and materials used for improvements with the overall Village Center theme to add to the unique identity of Lake Grove.
- Provide uniform intersection and crosswalk treatments throughout the corridor.
- Construct pedestrian crossings at all signalized intersections. Provide textured concrete pedestrian crosswalks on all intersection approaches within the asphalt roadway section, similar to that seen in downtown Lake Oswego along “A” Avenue, while ensuring consistency with the Village Center theme.
- Provide pedestrian refuges within center medians.
- Ensure the visibility of pedestrians in areas where they are in the proximity of vehicular and bicycle flow.
- Use street planters, street lighting (to improve visibility at night), and on-street bicycle lanes shall to act as pedestrian buffers and improve comfort and safety for pedestrians.

(10) Parking Facilities and Access Coordination

Combine access strategies to provide convenient access to commercial sites and parking facilities, create a more pedestrian friendly environment and enhance safety for all. Coordinated shared parking and access is recommended within the access coordination areas identified in the Parking Facilities and Access Coordination Map, Figure 7. The recommended integrated approach includes the following:

- Require the consolidation of driveways as properties redevelop along Boones Ferry Road.
- Allow minimum access drive spacing of every 150 feet, using shared access drives where possible. Access spacing greater than 150 feet is preferred if consolidation of properties results in longer parcel frontage on Boones Ferry Road.
- In areas where a raised center median has been installed, allow flexibility in meeting access consolidation requirements prior to redevelopment at a future time when access points can be consolidated.
- Provide rear alley access to parking facilities, where appropriate, in conjunction with consolidated access to reduce turning movements onto and off of Boones Ferry Road.
- Require connections between parking facilities and crossover easements to create rear access routes and shared drives, and thereby enhance convenient access to businesses. The area east of Boones Ferry Road between McDonalds and Bryant Road illustrates how additional access to parking and businesses is provided using routes through adjacent parking lot connections and shared drives.
- Assure access routes are provided to commercial sites along Boones Ferry Road in conjunction with the installation of raised medians and restriction of left-turn movements.
- Consider existing and potential parking facility connections for locations shown in Parking Facilities and Access Coordination Map, Figure 7 to identify access routes appropriate for specific locations and development opportunities.
(11) Street Lights and Utilities

Provide single-head ornamental street lights at a spacing of approximately 2 poles per 75-feet (based on an 82-foot roadway cross-section and Illuminating Engineer Society standards). Considerations include:

- Light poles that are relatively low to the ground spread illumination evenly throughout the roadway and sidewalk areas.
- Street lighting should be shielded and designed to comply with dark sky principles so that glare and unnecessary spill light are minimized.
- Ornamental types can enhance the Village Center theme and foster a pedestrian-friendly, village “main street” environment.
- Pole design should allow for incorporation of flower baskets and banner treatments.

Relocating utility infrastructure underground is strongly desired by the Lake Grove community to provide a cleaner, aesthetically pleasing streetscape and to minimize safety hazards and problems associated with fallen power lines. Relocate utility infrastructure underground as roadway improvements and redevelopment projects are constructed. (Current City of Lake Oswego policy is to underground utility infrastructure in conjunction with major roadway improvement projects.)

b. Kruse Way

Kruse Way is a major arterial. The design concept is to retain its boulevard character. Kruse Way includes two travel lanes in each direction with landscaped medians and turn pockets. To facilitate pedestrian crossings, the intersection of Kruse Way and Mercantile Drive/Daniel Way will need to be improved to better define the pedestrian crosswalk and strengthen the connection between the Safeco site and the Village Commons area. The character of the streetscape is achieved by the following features:

1. Development setbacks along the street.
2. Limited points of direct vehicular access.
3. The provision of street trees and heavy landscaping.
4. Pedestrian pathways.

Cross-Section 4. Gateway Concept (Pedestrian Enhancements) at Kruse Way and Boones Ferry Road
c. Village Cross Streets

Design Village Cross Streets to provide vehicular, pedestrian and bicycle access between uses in the Village Center and connections to and from the surrounding residential neighborhoods and employment areas. Cross streets are envisioned to be fronted with a mix of small scale commercial, retail and residential uses.

Carman Drive, Bryant Road, Quarry Road, Oakridge Road, Reese Road, Lake Grove Avenue and Firwood are classified as collectors (Transportation System Plan, Lake Oswego Comprehensive Plan). Collectors generally are designed to include two travel lanes, on-street parking and turn refuge lanes at intersections subject to City review and approval.

The remaining cross streets in the Village Center are classified as local streets which also are designed with two travel lanes and on-street parking. The design concept for Village Cross Streets is shown in Cross-Section 5. Street elements include:

- Two travel lanes, shared with bicycles. Separated facilities may be developed on collectors identified for bikeways;
- On-street parking; and
- Sidewalks with street trees.

The design concept features an urban streetscape character including on-street parking within the adjacent one or two blocks from Boones Ferry Road. Considerations include:

- Providing on-street parking on the cross-streets is one way of reinforcing the changing character and environment as one travels off of Boones Ferry Road.
- Within the Village Center, on-street parking is desired where right-of-way allows. On-street parking in single-family areas adjacent to the Village Center is discouraged.
- The provision of on-street parking can be used to supplement the private parking supply within the Village Center.
d. Hallmark Festival Street

Special design treatment is proposed for Hallmark Drive between Douglas Way and Mercantile Drive to create a street without curbs that can be easily used for festivals, markets and other community events. The project is identified in Street Improvements, Table 1, Lake Grove Village Center Transportation Projects. The location is shown on Figure 3, Street Improvements Map and Figure 4, Pedestrian Facilities Map. Festival street improvements strengthen the relationship between gathering places and the village commons identified on the Pedestrian Facilities Map (see also Village Commons, Gathering Places and Gateways Map, Figure 9). When not used for community events, cars can drive on the festival street.

The festival street design concept includes:

- Bollards, street trees, or other elements to delineate the boundary between the sidewalk and the roadway (no curb)
- Retractable bollards may be provided to restrict vehicle access during events.
- Wheel stops
- Special paving
- Special landscaping
e. Pedestrian Connections

Sidewalk and pathway projects are identified to provide a continuous, connected, safe and aesthetically pleasing pedestrian environment throughout the Lake Grove community. Proposed projects are identified and prioritized in Pedestrian Facilities, Table 1, Lake Grove Village Center Transportation Projects. Project locations are shown on Figure 4, Pedestrian Facilities Map. Areas where additional facilities providing pedestrian access to the Village Center may be desired include the Lake Forest neighborhood via Carman Drive, and neighborhoods to the north including Holly Orchard and Mountain Park.

The design concept for Village Center sidewalks and pathways distinguishes between the commercial core and transition areas to residential neighborhoods:

- In commercial and mixed use areas of the Village Center, curb and gutter sidewalks are proposed to fill existing gaps in the pedestrian network.
- As streets transition from the commercial core to the surrounding residential land uses, meandering, separated pedestrian paths are proposed.
- Standards should be developed for pedestrian facilities.
- To ensure development reinforces the pedestrian environment and design concept for pedestrian facilities, design standards and development standards should be developed to, among other things, bring building storefronts up to the right-of-way.

f. Bicycle Facilities

Bike lanes along both sides of Boones Ferry Road between Mercantile Drive and Madrona Street, and Bike Ways on Quarry Road and Bryant are identified to connect existing gaps in the bicycle network, and encourage cycling in the Village Center area. Proposed projects are identified and prioritized in Bicycle Facilities, Table 1, Lake Grove Village Center Transportation Projects. Project locations are shown on Figure 5, Bike Facilities Map.

The Transportation System Plan designates bike lanes on Boones Ferry Road and for Quarry and Bryant Roads in the Village Center. Additionally, the TSP designates bike lanes on Oakridge Road and Firwood Road.

Design considerations for bicycle facilities:

- Bikeways identified as Village Center projects on Quarry and Bryant Roads may include bike lanes, shared pathways or shared roadways.
- Additional study is needed to determine safe bicycle and pedestrian access on Quarry Road.
- Bike lanes on Oakridge Road and Firwood Road are not being recommended in this Plan. Shared roadways were determined to be more appropriate due to lower traffic volumes and speeds and narrower street widths.
- The bicycle network can be enhanced by proposing bicycle routes or connections throughout the Village Center area on collector and local streets, the access lane, and pathways. Although exclusive on-street bike lanes are not warranted given the forecast traffic volumes on these streets, future roadway improvements should be constructed with adequate shoulder and lane width to comfortably accommodate cyclists.
- All neighborhood streets serve as bike routes, with pavement kept in a condition that is conducive to bike travel.
- Under current City policy not every street is marked for bikes. Establish a neighborhood bike route through and around the Village Center to provide an easily accessible option for bicyclists.
- Provide amenities for cyclists as part of streetscape and urban design enhancement projects including bicycle racks and bicycle parking areas to encourage cycle use and provide opportunity for cyclists to secure their bicycles during trips.
- Street furniture, improved intersection crossings, median treatments and landscaping all enhance safety and aesthetics within the Village Center and make cycling a more pleasurable and, therefore, viable mode of travel. Landscaped medians (to reduce the exposed crossing distance) and pedestrian-scale street lighting (to improve visibility at night) implemented as part of future roadway and redevelopment projects enhance the streetscape environment for bicyclists.

g. Transit

Coordinate with TriMet to develop and maintain enhanced public transit service to, from and within the Village Center area. Develop a viable, effective public transit plan that provides reliable transit service along Boones Ferry Road at headways of approximately ½-hour or less during all time periods. Ideally, headways would not exceed 15 minutes given Boones Ferry Road’s designation as a Regional Bus Route. Proposed urban design guidelines within the Village Center will enhance the multi-modal character of the area and foster a pedestrian and transit-friendly environment conducive to walking and transit trips.

Five new transit stop shelters are identified in Transit Facilities, Table 1, Lake Grove Village Center Projects. Major transit stop locations on Boones Ferry Road at Kruse Way Place, Mercantile Drive, Reese/Oakridge Road and Bryant Road are shown on Figure 6, Transit Facilities Map. Two additional stops, designated on the map as “Additional Bus Stop As Required,” are included at Lanewood and the future signalized crossing between Reese and Bryant Roads. Accommodations for power supply at transit stop locations should be incorporated into the design of any future streetscape improvements along Boones Ferry Road to allow for future lighting and real time information kiosks at these locations. TriMet’s standards and guidelines for transit design include the following:

- Transit stops within should ultimately be located approximately every 750 feet near major activity areas. Transit stop location should also carefully consider proximity and accessibility to safe and convenient pedestrian crossing locations.
- At controlled intersection locations, bus stops should be located on the far side of the intersection, preferably 50 to 80 feet from the intersection in order to maximize pedestrian visibility and bus operations.
- Street tree and landscaping in the vicinity of transit stops should be strategically placed to ensure both visibility and accessibility for transit riders boarding or deboarding.
- The urban, pedestrian-scale street lighting proposed along Boones Ferry Road will provide a comfortable environment for transit riders walking to and from stop locations and visibility for riders waiting at transit stops.
- Amenities, such as shelters and benches, should be provided at focal transit stop locations as part of the urban streetscape design along Boones Ferry Road. The City can either provide and maintain these facilities on its own (such as is the case along A Avenue) or work with TriMet for these provisions. TriMet currently uses the guideline of a minimum of 35 daily boardings at a given stop before considering providing a shelter.
h. Phasing and Timeline

(1) Phasing

Planned improvements to Boones Ferry Road will occur under different property development conditions. It is assumed that road improvements will occur in phased segments. Criteria for prioritization and timing of segment improvements include:

- Cost and financing methods;
- Public demand;
- Safety needs;
- Redevelopment opportunities; and
- Physical and right-of-way constraints of the segment.

Given that all criteria will play into prioritization decisions, it may be beneficial to first focus on areas with few constraints to allow time for redevelopment to occur in constrained areas.

(2) Timeline

The following timeline provides a general recommendation for the implementation of the Boones Ferry Concept Plan:

- 2008 – Adopt Boones Ferry Concept Plan as part of the Lake Grove Village Center Plan;
- 0 to 5 years – Complete detailed design and engineering studies to address green street concepts, street design, and funding;
- 6 to 10 years – Phase 1 construction; and
- 11 to 15 years – Phase 2 and 3 construction.
II. LAND USE

Existing Conditions

Land Uses - Land within the Village Center boundary consists of approximately 105 acres (excluding streets), including a mix of uses as follows: 8.8 acres multi-family residential, 1.5 acres single family residential, 20.8 acres of retail, 38 acres of office, 8 acres of mixed use office/commercial, 11.6 acres vacant, 2.4 acres open space/parks, 11.3 acres school (public and private) and 2.1 acres government use. The relatively large amount of office land is concentrated around Kruse Way in the northern portion of the Village Center.

The Lake Grove Village Center boundaries encompass lands zoned General Commercial (GC), Office Commercial (OC), Neighborhood Commercial (NC) and High Density Residential (R-0, R-3 and R-5). The commercial area along Boones Ferry Road is zoned GC and allows for a broad range of commercial activities as well as residential uses. Public facilities are planned within the Village Center area including sewer, water and surface water, and these facilities are adequate to support the range and intensity of uses currently allowed within the area.

Town Center Designation - The Metro Functional Plan and City of Lake Oswego Comprehensive Plan designate the Lake Grove area and Downtown as “town centers” in Lake Oswego. According to the Comprehensive Plan, town centers are areas where good transit services, a pedestrian environment, shopping, services, entertainment, and higher density housing will be encouraged so that residents may have more transportation choices by locating near these uses and services. In Lake Grove, commercial development is to be limited to accommodate community needs for goods and services desired by the market area defined by Lake Oswego’s Urban Services Boundary.

Metro Targets - The Metro Functional Plan recommends job and housing targets for town centers and main streets of 39 to 40 persons per acre. At approximately 105 acres within the Village Center, Metro density targets translate to 4,095 to 4,200 residents and employees as capacity targets.

Density - An inventory of land uses within the Village Center boundary indicates approximately 200 dwelling units. At 2.0 persons per household, this translates to 400 residents or 3.4 residents per acre. Commercial and high density areas that comprise the Village Center are surrounded primarily by single-family residential development. 2000 census data indicated there were 4,755 residents within an area including the Village Center and a ¼ mile distance from the Village Center boundary. A 1994 jobs inventory by the City of Lake Oswego indicated approximately 2500 jobs within an area including the Village Center and a ¼ mile distance from the Village Center boundary.

Demographics - 2000 census data indicated over 20% of the 4,755 residents within an area including the Village Center and a ¼ mile distance from the Village Center boundary were between 20 and 34 years of age, compared to 12% for the community as a whole. Forty-four percent of residents in this area own their homes compared with 66% for the community as a whole and 58% region-wide.
Development Pattern and Character

The predominant pattern of development in Lake Grove is characterized by in-line strip “malls” and pad buildings separated from Boones Ferry Road by parking lots. Shop fronts are separated from the street in contrast to the typical village pattern in which shop fronts face the street directly, on-street parking is provided, a park strip separates the sidewalk from moving vehicles, and clear visibility is provided from inside of buildings to the street.

The zone between the curb and the property line or building is the area most people see first when they drive down Boones Ferry Road and the area that pedestrians experience as the walk along the street. This edge zone has no unifying features. Every lot has its own landscape treatment and its own sidewalk configuration. The park strip (trees planted between the curb and the sidewalk) that typically separates the sidewalk from the drive zone, is non-existent along most of Boones Ferry Road. In some areas, the edge zone is devoid of landscaping and other forms of pedestrian protection, and parking lots and streets flow one into the other. With no on-street parking on Boones Ferry Road, the pedestrian experience can be particularly harsh where park strips are absent.

The architectural style of buildings in Lake Grove is eclectic, offering everything from “stark modern” to “cottage rustic.” Site design and landscaping contribute significantly to the lack of visual order – from the picturesque cottage framing a single tree, to international style modern, surrounded by sleek, manicured shrubs and lawn. There are an array of materials featured – wood, framed house-like structures, masonry with punched openings, and stucco.

Where they are present, small, locally-owned shops, lush perennial beds, and small-scale architecture provide some sense of a village community. Significant groves and mature Douglas fir and understory trees dominate certain areas. The ever-present backdrop of fir trees contribute significantly to Lake Grove’s character.

Issues Summary

- The Village Center is a long and narrow commercial district, bordered by low density residential neighborhoods. The Village Center Plan addresses the current and near-term requirements of land use and transportation within the existing constrained commercial area. The community will engage in periodic reviews throughout the 20-year life of the Plan in response to development challenges and opportunities. Eventually, the community may need to consider expanding the Village Center to meet community needs, and better accommodate and manage growth.

- There is more of a memory of a village in Lake Grove than a distinct physical manifestation of village character. Re-establishment of a true and functional village character will rely on guiding new development for desired uses, scale and character.

- The proximity of commercial and higher intensity uses to established low density residential neighborhoods presents conflicts as well as opportunities. Concerns include protecting existing neighborhood livability, and the impacts of potential standards to protect residential neighborhoods on commercial operations.

- The presence of mature Douglas-fir trees is a significant determinant of Lake Grove’s character and identity.
The land use concept for the Lake Grove Village Center focuses on the following areas:

- A Mixed Use Center
- Village Commons, Gathering Places and Gateways
- Village Character
- Linkages with Great Neighborhoods – Connections and Transitions

**A Mixed Use Center**
The Lake Grove Village Center provides opportunities for commerce, service, civic, social, cultural and related activities for the people who live and work in and near the Village Center. The mixed use concept preserves and enhances commerce and economic vitality through an attractive and accessible mixed use center. Integrated land use and transportation strategies promote a thriving business district while providing a safe, welcoming and convenient pedestrian- and bicycle-friendly environment. In the core business area, the General Commercial zone designation permits a variety of retail, office, and residential uses, with mixed use residential development encouraged through incentives. A variety of uses in close proximity to each other are encouraged, with more intensive uses along Boones Ferry Road and Kruse Way, and less intensive, smaller scale uses on the village cross streets.

The urban design of a successful mixed use area involves:

- High density residential development
- Prohibiting big box retail and limiting drive-through facilities
- Street enclosure
- Varied building heights
- Structured parking or surface parking at the rear or sides of buildings
- Shared parking and parking lot connections
- Consistent public signage
- Safe pedestrian crossings
- Landscaped center medians with pedestrian refuges
- Continuous sidewalks
- Bike facilities
- Street trees
- Pedestrian-scale street lights
- Public transit shelters and other streetscape elements

**Village Commons, Gathering Places and Gateways**
A series of public plazas and open space features and a village commons within the Village Center and along Boones Ferry Road create a sense of place, provide community gathering spaces, and establish focal points for development and redevelopment. The village commons and each gathering place serve as an individual location for a programmed event or informal gathering, or could be used with other areas to accommodate coordinated events throughout the Village Center. Public parking is conveniently located in the vicinity of the gathering places. A pathway system links the village commons and gathering places into a walkable series of coordinated, distinct public spaces, the “string of pearls.” Design elements consistent with the distinct character identified by the Village Center theme establish a common identity and relationship between the village commons, gathering places and gateways.
The concept identifies an area within which to locate the larger village commons and seven locations for gathering places with specific urban design treatment identified for each location. Some gathering places are plazas or other types of common areas with “hardscape” elements such as a focal point or design feature, seating and paved areas. Other gathering places are open natural areas with “greenscape” elements, where natural features such as mature trees, wetlands and riparian areas are preserved and enhanced.

Gateway features serve as symbols and notify drivers and pedestrians that they have entered the Lake Grove Village Center. Gateway features are located at the Kruse Way Boones Ferry intersection and at Boones Ferry Road northeast of the railroad track crossing and southwest of Washington Court on the slope.

**Village Character**

Lake Grove’s unique village character is celebrated and enhanced by preserving or restoring natural resources and encouraging of a diverse mix of tasteful architectural styles. The Village Center theme unifies and connects the village commons, gathering places, gateway features and streetscape elements throughout the Village Center. The Village Center theme incorporates materials and design features reflecting mature native trees found in Lake Grove and other natural elements such as water and stone.

A diverse mix of architectural styles and building features blend past and future development, and reflect the area’s rural and independent roots. To foster compatibility, development review addresses scale, design and exterior building materials. Development standards encourage sustainable building and site development practices. Design requirements that break up building mass, step back building height, reduce blank walls, and create a sense of enclosure contribute to a rich, pedestrian-scale environment.

**Linkages with Great Neighborhoods – Connections and Transitions**

Village cross streets provide a transition from more intense commercial development on Boones Ferry Road to less intense development approaching surrounding single-family residential neighborhoods. Along the pedestrian-friendly village cross streets, land uses include mixed use: street-level, active retail and neighborhood commercial uses, with residential and/or office in the upper levels or behind.

Surrounding neighborhoods retain their green, low-density character, and existing residential zoning prohibits expanded commercial uses. The urban design concept steps down building height and intensity as development approaches the edges of the Village Center, with development standards that mimic or are very similar to residential zone setbacks, heights and floor area ratios when commercial uses or high density residential uses abut low density residential zones. Adequate buffers, landscaping and other standards mitigate noise, light and other potential nuisances from adjacent commercial development. The concept encourages new pedestrian routes to provide access to the Village Center where appropriate.

Urban curb and gutter sidewalks transition to “residential” pathways as they approach the neighborhoods, providing safe and convenient connections to the Village Center and surrounding neighborhoods. Pedestrian friendly village cross streets are characterized by pedestrian crossings; benches, seating walls, small plazas, and adapting building size and street type in the transition to adjacent neighborhoods.
Goal 4. Encourage a Mix of Uses Within the Village Center.
Promote an economically vibrant, sustainable, and transportation efficient district based on a range of uses and compact development.

Policies:
4.1 Foster a mix of uses, including retail businesses, services, offices, and residential development.
4.2 Preserve and increase the number of high density housing units and provide a range of housing opportunities.
4.3 Encourage the retention or addition of affordable housing.
4.4 Encourage retention of local, small-scale and independent businesses at redevelopment.
4.5 Develop incentive programs and code provisions to encourage retail, mixed use, and high density housing projects.
4.6 Promote sustainable and low-impact development strategies for private and public development.

Goal 5. Strengthen the Lake Grove Sense of Place and Community.
Provide public uses designed to foster community relationships and to leverage desired private development.

Policies:
5.1 Create a series of community gathering places (a “string of pearls”) throughout the Village Center to enhance Lake Grove’s sense of community identity and provide opportunities for social and cultural engagements.
5.2 Create a village commons to serve as a major attracter and location for community events.
5.3 Coordinate access to community uses at the West End Building site.
5.4 Foster a sense of place by coordinating unified design elements and features in public areas throughout the Village Center. (Refer to policies under Goal 6 Enhance Village Character below.)
5.5 Provide distinctive public art to reflect Lake Grove’s history or unique character.
Create a distinct Lake Grove identity based on unified design features that support pedestrian activity and are compatible with existing development.

Policies:
6.1 Ensure development contributes to a unified village character.
6.2 Ensure consistent streetscape and public area design treatments reflecting mature native trees, water, stone, and other elements characterizing the area’s natural environment.
6.3 Create a safe, attractive pedestrian environment while incorporating sustainable practices and products.
6.4 Permit a diverse mix of building styles, foster compatibility, encourage sustainable building and stormwater management practices, and create a rich, pedestrian-scale environment.
6.5 Invite people into the district Define entries into the Village Center with unique gateway features on Boones Ferry Road that reflect Lake Grove’s sense of place.
6.6 Preserve and highlight the history of Lake Grove.

Goal 7. Protect the Residential Character of Adjoining Neighborhoods.
Maintain livability in adjoining low-density residential neighborhoods by ensuring compatible Village Center development.

Policies:
7.1 Reduce impacts on surrounding residential development using landscaping, lighting, noise mitigation and other standards to create buffers between development in the Village Center and abutting residential neighborhoods.
7.2 Transition and decrease the intensity and scale of development along the cross streets transitioning from Boones Ferry Road to the edges of the Village Center.
7.3 Manage on-street parking opportunities for neighbors who live adjacent to the Village Center.
7.4 Discourage cut-through traffic in the neighborhoods. Ensure that current classifications of streets are maintained.
Action Measures – Land Use

Land use action measures are organized under three headings: i) Lake Grove Village Center Zoning and Code Amendments; ii) Incentives; iii) Community Projects; and iv) Village Character.

i. Lake Grove Village Center Zoning and Code Amendments

   a. **Zoning Map** (Policies 4.1; 4.2; 7.1; 7.2)
      Amend the Zoning Map to indicate designations and locations identified on Figure 8, Zoning and Overlay Map.

   b. **Code Amendments** (Policies 4.4; 6.4; 7.1; 7.2; 7.3)
      Amend code provisions as required to accomplish the following:
      1. Prohibit strip commercial development and restrict drive-through development.
      2. Restrict big box development and the size of single retail uses to protect village character and retain local, small-scale and independent businesses.
      3. Require the use of architectural features, stepping back of building height and/or setbacks to break up building mass at the street.
      4. Limit lot coverage, building setback, height, and allowed uses to decrease the scale of development in the transition to low-density neighborhoods.
      5. Preserve on-street parking for residents in low-density neighborhoods.
      6. Encourage the use of quality exterior building materials compatible with Lake Grove character.

ii. Incentives (Policies 4.2; 4.3; 4.4; 4.5; 4.6; 6.4)

   a. Develop incentive programs to retain or increase desired uses, projects and practices including, but not limited to:
      - Mixed use
      - Neighborhood-serving retail
      - High density housing
      - Affordable housing
      - Sustainable building and stormwater management practices
      - Gathering places and public plazas
      - Pedestrian access and improvements
      - Tree groves

   b. Consider development bonuses, fee waivers, tax credits, loans, grants and if applicable, redevelopment assistance. See also Lake Grove Village Center Plan, Goal 9, Economic Development Action Measures, i. Programs and Incentives.
iii. Community Projects

a. **Projects** (Policies 5.1; 5.2; 5.3; 5.4; 6.5)

Implement projects identified in Table 3 below, and on Figure 9, Village Commons, Gathering Places & Gateways Map.

<table>
<thead>
<tr>
<th>Location</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway feature at Kruse Way between Daniel Way/Mercantile Drive &amp; Boones Ferry Road, and at Boones Ferry Road between Kruse Way Place &amp; Mercantile Drive.</td>
<td>HIGH</td>
<td>Enhanced sidewalk/multi-use pathway and streetscape. See Transportation Projects 9a &amp; 9b, Table 1, and Design Direction b. Kruse Way.</td>
</tr>
<tr>
<td>Gateway feature at Boones Ferry Rd, north of RR crossing, in public ROW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td>Village Commons</td>
<td></td>
<td>Larger scale Village Commons area, incorporate hardscape and greenscape areas, including a natural water feature. See Goal 8: Protect Natural Resources and Enhance the Natural Environment for action measure to conduct an engineering/hydrological study to determine the feasibility of restoring Three Sisters Creek for incorporation into the development of the Village commons.</td>
</tr>
<tr>
<td>Gathering Place - SE of Boones Ferry Rd/Lanewood St, current Pacific Lumber site</td>
<td></td>
<td>Hardscape elements</td>
</tr>
<tr>
<td>Gathering Place - W of Boones Ferry Rd across from Lanewood south of Lake Grove School driveway</td>
<td>HIGH</td>
<td>Hardscape and greenscape elements.</td>
</tr>
<tr>
<td>Gathering Place - NW of Boones Ferry and Oakridge current Post Office site</td>
<td></td>
<td>Hardscape and greenscape elements, including the preservation of existing mature trees on the site</td>
</tr>
<tr>
<td>Gathering Place - On either side of Boones Ferry Rd between two new pedestrian crosswalks to be located between Oakridge and Quarry Rds</td>
<td></td>
<td>Hardscape and greenscape</td>
</tr>
<tr>
<td>Gathering Place - SW of Boones Ferry and Bryant current Bank of America/Wizer's site</td>
<td></td>
<td>Hardscape</td>
</tr>
<tr>
<td>Gathering Place - NE of Bryant and Sunset current Lake Grove Fire Station site</td>
<td></td>
<td>Greenscape features including preservation of the existing grove of large firs on the site designated by the City as a Heritage Tree Grove</td>
</tr>
</tbody>
</table>

b. **Village Commons and Gathering Places** (Policies 5.1; 5.2; 5.3; 5.4)

Consult the following for the design of a village commons and gathering places:

1. Incorporate natural features where possible.
2. Ensure adequate public parking.
3. Use common design features along sidewalks and pathways to create identity and provide connectivity between the village commons, gathering places, local parks and neighborhood recreational amenities.
4. Locate the village commons to leverage the greatest possible private development on adjacent properties. Give priority to locations that are in close proximity to Hallmark Drive, Three Sisters Creek and the Lake Grove Elementary School. Do not locate Village Commons immediately adjacent to Boones Ferry Road.
5. If located in close proximity, coordinate the village commons improvements with the design of Hallmark Drive for use as festival streets. (Hallmark Festival Street is identified in Transportation Action Measures (v) Design Direction, (d) Specialty Streets, (2) Hallmark Festival Street.)
c. **Gateways (Policy 6.4)**
   Consult the following for the design of designated gateway features:
   
   (1) The design of gateway features shall be coordinated with, and complementary to, the Village Center theme.
   
   (2) Gateway features shall be plainly visible to drivers, cyclists and pedestrians passing the Gateway feature.
   
   (3) Reference the area’s natural environment including native tree groves, water and stone (See Land Use Action Measures (iv) Village Character, (a) Village Center Theme.)
   
   (4) See Transportation Projects 11a and 11b for Village Gateway streetscape enhancements at Kruse Way and Boones Ferry Road.

iv. Village Character

a. **Village Center Theme (Policies 5.4; 5.5; 6.1; 6.2; 6.6)**
   Develop and implement a community-wide process to create the Village Center theme to inform designs for public areas including streetscape improvements, the village commons, gathering places and gateways. Incorporate materials and design features reflecting Lake Grove’s natural environment including mature native trees, water and stone. Consider highlighting historic features, activities and businesses.

b. **Lake Grove Village Center Design Handbook (Policy 6.1)**
   Develop and implement a Lake Grove Village Center Design Handbook for use by staff, developers, consultants and the review authority to ensure public transportation and community projects and private development contribute in a coordinated manner to the distinct identity of the Lake Grove Village Center. The handbook includes the following sections:

   (1) **Village Center Theme Section (Policies 5.4; 5.5; 6.2; 6.3; 6.5; 6.6)**
   The provisions of the Village Center Theme Section of the Lake Grove Village Center Design Handbook ensure a coordinated, unified village character based on community-wide input. The Village Center Theme Section provides public area design requirements, guidelines and illustrations, and clarifies the respective responsibilities of the City and development applicants to provide public area elements. Elements addressed include:
   - Street lights and other lighting in public areas
   - Street trees
   - Sidewalks
   - Landscape elements including paving, water features and plant materials
   - Street furniture including benches and other seating, umbrellas, drinking fountains, trash receptacles, newspaper racks, kiosks, push carts, bicycle racks and transit shelters
   - Public Art
   - Public Signage and symbols
   - Village Center logo
(2) Building Design Section  (Policies 6.4; 6.6)

The provisions of the Building Design Section of the Lake Grove Village Center Design Handbook ensure buildings contribute to a harmonious mix of compatible, appropriate architectural styles. It is a tool for understanding the City’s design concerns for the Lake Grove Village Center and should be informed by the Village Center Theme (see Land Use Action Measures (iv)(b)(1): Village Character, Village Center Theme Section above.) Descriptive text, regulatory references and visual examples are provided to illustrate the following:

- Architectural styles and features
- Village scale
- Pedestrian Features
- Materials

c. **Art and Seasonal Decorations** (Policies 5.5; 6.3; 6.5; 6.6)

(1) Provide public art appropriate for specific Lake Grove locations. Coordinate with the Public Art Committee for public projects subject to the provisions of the Percent for Art Program (LOC Chapter 18).

(2) Provide decorative streetscape elements such as seasonal decorations, hanging baskets and special event banners.

d. **Lighting Standard** (Policy 6.3)

Develop a lighting standard that provides pedestrian scale street light. Lighting should be shielded and designed to comply with dark sky principles so that ambient light is minimized. Lighting should be directed downward to improve pedestrian and vehicular visibility and safety.

e. **Maintain Street Classifications** (Policy 7.4)

Actively monitor and manage traffic speed, traffic volume and neighborhood cut-through traffic to maintain current street classifications.
Special District Plan:
Lake Grove Village Center Plan
Special District Plan:
Lake Grove Village Center Plan
III. Natural Resources

Existing Conditions

Lake Grove is enhanced by its natural surroundings. Lake Grove’s character is largely attributable to a backdrop of mature fir trees.

Code Protections
Existing mature trees, tree groves, wetlands and riparian areas are primarily protected through existing City code provisions. Development on properties with inventoried trees groves, wetlands and riparian areas is regulated by the Community Development Code’s Sensitive Lands Overlay, with the removal of individual trees on private property regulated by the City Tree Code. Sensitive lands designated for natural resource protection in the vicinity of the Village Center plan area include:

- Tree groves located in East Waluga Park and extending southward into the Village Center plan area.
- Three Sisters Tributary – Flows southward from the north plan area boundary along Daniel Way, under Kruse Way, and through the Mercantile Village area to just north of Collins Way.
- Springbrook Creek – Flows east at the northeast side of the Village Center plan area in the area of Pennington Park. Recent City efforts have helped to restore segments of Springbrook Creek.
- Waluga Tributary – Flows east near the southern boundary of West and East Waluga Park, just outside the Village Center boundary.

Heritage Groves
The grove of Douglas-fir trees located at the Lake Grove Fire Station property on Bryant Road have been designated as Heritage Trees. The trees are estimated to be between 45 to 75 years old. The tree canopy covers the entire property and was determined to represent the character of the neighborhood.

Natural Resource Concept

Lake Grove’s village character is shaped by a respect for and preservation of natural resources. This unique character is reflected in a distinct Lake Grove Village Center theme that unifies and connects streetscape elements and public areas throughout the Lake Grove Village Center. Three Sisters and Springbrook Creeks have been improved to provide natural water features for the enjoyment of residents, employees and visitors in the Village Center. Natural resource enhancements restore the natural functions of a healthy watershed, improve water and air quality, slow global warming, reduce heat generated by urban landscapes, increase wildlife habitat, soften the visual impact of urban development and add value to nearby properties.
Goal 8. Protect Natural Resources and Enhance the Natural Environment Within the Village Center.

Strengthen Lake Grove’s character, enhance quality of life, and promote clean, efficient practices through stewardship of the natural environment.

Policies:

8.1 Preserve existing trees and tree groves, in particular native species to the greatest extent practicable.
8.2 Require new street trees whose growth pattern will achieve a sense of enclosure.
8.3 Improve Three Sisters and Springbrook Creeks, as redevelopment allows. Recognize, protect and enhance the role of the Waluga Tributary to the ecological function of Springbrook Creek and the area’s riparian resources.
8.4 Encourage the use of sustainable building and development practices (e.g. recycled or low-impact building materials, on-site stormwater retention, pervious paving materials, “green streets”).
8.5 Encourage the use of sustainable street design and stormwater management practices (e.g. “green streets”, pervious paving materials).
8.6 Integrate and enhance access to parks and open space (e.g. Springbrook Creek/Pennington Park, Waluga Park).

Action Measures – Natural Resources

i. Natural Water Feature at Mercantile Village (Policy 8.3)
An engineering / hydrological study should be funded and conducted to determine the feasibility of restoring Three Sisters Creek in the area of Mercantile Village and day-lighting its possible connection to Springbrook Creek to the east of Boones Ferry Road. If deemed feasible, a restored creek would provide a natural water feature for the enjoyment of residents, employees and visitors, and should be incorporated into the development of the village commons. The study should address the feasibility of daylighting piped segments of the Waluga Tributary between the southern Waluga Park area and Springbrook Creek. Consider other riparian ecology enhancement measures including establishing macro-invertebrate nurseries and applying conservation easements.

ii. Sustainable Development Provisions (Policy 8.4)
Amend code provisions as required to provide development bonuses for sustainable building and stormwater management practices. (See Land Use Action Measures ii.)

iii. New Tree Groves (Policy 8.1)
Study the feasibility of offering development and other incentives to establish new tree groves in the Lake Grove Village Center. Such a program might build on existing tree cutting mitigation policies, or replace such policies with new water features that allow for the transfer of tree canopy from one location to another within the Village Center. The City should limit incentives to proposals that increase the amount tree canopy and the extent of tree grove land area cover in excess of the amount lost through development. The program should encourage coordinated actions among private parties, public-private partnerships, and cooperative planning with neighborhood associations.
IV. ECONOMIC DEVELOPMENT

Existing Conditions

Lake Grove Businesses – There are approximately 400 individual businesses within the Village Center. Business organizations focused on representing commercial interests within Lake Grove include the Lake Grove Business Association, Lake Grove Commercial Association and Lake Grove Commercial Property Owners Association. Lake Grove commercial interests are also represented by the Lake Oswego Business Alliance and Lake Oswego Chamber of Commerce.

Market Analysis – A 2002 market study indicated strong demographics in the trade area characterized by high average household incomes. Because Boones Ferry Road is a major regional arterial, the defined trade area includes nearly all of Lake Oswego. Neighborhood retail accounts for almost three-quarters of the retail in Lake Oswego.

Commercial Environment - The majority of the property within the Village Center is currently improved, and development in the area will have to come in the form of redevelopment of existing projects. The area is characterized by largely thriving local businesses, and the remaining economic life of existing improvements will allow for only limited redevelopment potential. The study area is considered a highly desirable location for restaurant and service retail tenants. The proximity of the Kruse Way office concentration and the strong demographics of the trade area support large daytime as well as evening populations.

Parking Supply - In general, the peak weekday parking utilization (or peak parking demand) within the study area occurs during the midday time period (11:30 a.m. through 12:30 p.m.). This result is from the mix of office, retail, and commercial land uses within the study area. There are certain parcels and developments, particularly in the central and western portion of the study area (i.e., south and west of Reese Road) where parking is currently operating over effective capacity during peak time periods, particularly at midday. However, overall there is adequate parking supply to meet the existing parking demand in most locations throughout the study area.

Issues - Concerns expressed by business and property owners and locally active brokers include the following:

- Loss of parking within the Village Center is a major concern. Business owners within the Village Center area have identified landscaping requirements as a key constraint to their ability to provide required parking and connections in appropriate locations.
- A primary weakness of the area from a business perspective is access to and from businesses.
- Reducing the Boones Ferry Road special street setback would allow for a larger area of adjacent property to be retained for development.
- Flexible landscape requirements would help ensure that appropriate connections between parking areas are provided.
- An emphasis on high quality landscaping in predominant locations within the Village Center significantly contribute to the attractiveness of the area to businesses, customers and residents.
- There are few opportunities for new tenants to enter the market, or for commercial redevelopment. There is very little space available in the market.
Create an economically viable business core where neighborhood-serving, independent businesses may flourish.

Policies:
9.1 Retain and attract neighborhood-serving businesses, diverse shopping opportunities and unique cultural attractions.
9.2 Stimulate and support the development of a local business organization to provide marketing and public improvement programs.
9.3 Provide adequate parking opportunities to serve businesses in the Village Center.
9.4 Ensure no net loss of parking facilities within the Lake Grove Village Center when making access modifications to Boones Ferry Road.
9.5 Strengthen connections between the Kruse Way employment area and Village Center retail and service businesses.
9.6 Improve vehicular access between businesses and Boones Ferry Road by requiring connectivity between parking lots and shared access drives where practical.

Goal 10. Identify and Implement Funding Mechanisms to Sustain Economic Vitality.
Ensure prosperity by providing for significant public input and review of economic impacts associated with funding mechanisms for public projects and programs.

Policies:
10.1 Provide adequate and sustainable funding mechanisms to implement the Plan.
10.2 Identify the Village Center as a priority investment area. Include plan projects in the Capital Improvement Plan.
10.3 Give funding priority to public area improvements to serve existing businesses and to leverage private investment.
10.4 Analyze estimated costs, benefits and economic impacts associated with proposed funding mechanisms prior to adoption.
10.5 Establish at the outset an extensive, neutral and thorough public process for review and recommendation of potential funding mechanisms prior to adoption.
i. **Programs and Incentives** (Policy 9.1)

   a. Develop programs and incentives to encourage mixed use development, housing and retail uses with a focus on retaining and attracting neighborhood-serving businesses, diverse shopping opportunities and unique cultural attractions. Consider a variety of programs and incentives to reduce the cost of development, stimulate market demand or eliminate regulatory barriers.

      Incentives may include:
      - Tax credits, including state programs addressing multi-unit housing (ORS 307.600) and vertical mixed use (ORS 285C.450), to exempt development from local property taxes for a 10-year period;
      - Fee and systems development charge waivers;
      - Small business loans;
      - Grants; and
      - Public parking facilities, access improvements, and parking waivers in proximity to public parking facilities.

ii. **Coordination** (Policy 9.2; 9.5)

    Coordinate planning programs and incentives with downtown programs and policies.

iii. **Local Organization** (Policies 9.1; 9.2)

    Consider establishing a local organization capable of attracting funds, obtaining grants and establishing programs in support of small businesses in the Lake Grove Village Center.

iv. **Long-term Strategic Planning** (Policy 9.2)

    On a regular basis, plan strategically and adjust accordingly for changes in markets, technology and demographics that will impact economic vitality in Lake Grove.

v. **Village Center Promotion** (Policies 9.1; 9.2)

    Support local stakeholders in the development of a strategy to promote the Lake Grove Village Center’s unique characteristics to residents, investors, and businesses.

    a. Foster a positive image through a range of locally-supported activities including advertising, retail promotional activity, special events, and marketing campaigns.

    b. Develop a Lake Grove Village Center Design Handbook for use as a marketing tool as well as for ensuring coordinated development (see Land Use Action Measure (iv)(b) Lake Grove Village Center Design Handbook).
vi. **Parking Supply** (Policies 9.3; 9.4)

Enhance the supply of parking and ensure no net loss of parking facilities within the Lake Grove Village Center when making access modifications to Boones Ferry Road within the Village Center as follows:

a. Develop parking lots/facilities.
   1. Acquire sites for public parking lots to enhance parking supply in the near term and to secure sites for development of future parking facilities.
   2. Develop parking facilities through public/private partnerships as opportunities arise and as needs are defined (see Table 1, Transportation Projects, Parking Facilities and Access Coordination, Project 33 and Parking Facilities and Access Coordination Map, Figure 7). Parking needs may arise in conjunction with redevelopment and Boones Ferry Road improvements.
   3. Distribute public parking facilities at convenient locations throughout the Village Center within each of the three parking service areas, North, Central and South, as shown on the Parking Facilities and Access Coordination Map, Figure 7.
   4. Site facilities to provide additional parking opportunities and ease of access to retail, restaurant and other neighborhood services.
   5. Locate and design facilities to minimize impacts to surrounding residential neighborhoods.
   6. Combine community parking locations with attractive pedestrian connections to contribute to the development of a walkable, livable atmosphere within the Village Center.

b. Enhance opportunities for on-street parking by establishing timed parking zones and/or loading zones and associated signage. Formalize on-street parking opportunities within the Village Center area.

c. Through development review, encourage shared off-street parking between abutting businesses and land uses where practical. Coordinate shared off-street parking facilities with access routes provided by required connections between parking lots and crossover easements (see Transportation Action Measures (v)(a)(10)). Shared parking agreements foster appropriate and efficient use of land within the Village Center, where one auto trip can be made to frequent a variety of different destinations, and promote a vibrant, walkable district.

vii. **Public Involvement** (Policy 10.5)

Develop a comprehensive public involvement and outreach program to educate, inform and solicit funding recommendations from Lake Oswego residents, business and commercial property owners.

viii. **Funding Mechanisms** (Policies 10.1; 10.2; 10.3; 10.4)

Adequate and timely funding is essential to achieve the goals of this plan. An urban renewal district and tax increment financing may be the most effective mechanism to implement plan projects. Investigate the creation of an urban renewal district and other mechanisms to fund capital improvements and programs. Fully investigate and outline financial and development opportunities and ramifications for each funding mechanism as a basis for funding decisions. Funding mechanisms to be investigated include, but are not limited to, the following:

a. Tax Increment Financing – Urban Renewal District. The creation of an urban renewal district including the Lake Grove Village Center should be investigated. A renewal district would
allow the use of tax increment financing for a variety of public improvement projects designed
to stimulate development and reduce costs for redevelopment projects.

b. Local Improvement District. Local improvement districts (LIDs) are taxing districts that are
created to pay for specific capital improvement projects that benefit the area in the district.
The City Council has the authority to create LIDs.

c. Economic Improvement District. Economic Improvement Districts (EIDs) are specific areas
where a majority of property owners and/or merchants agree to provide an extra level of public
service by imposing an added tax or fee on all of the properties and/or businesses in the area.
Examples of services include supplementary security, additional street cleaning, and the
unique marketing of events.

d. General Fund. Consideration should be given to using the City of Lake Oswego general fund
to finance Boones Ferry Road refinement studies and improvements. The general fund is a
fund used to account for financial operations of the City which are not accounted for in any
other fund. The allocation of funds should be explored through the Capital Improvement Plan
(CIP) and biannual budget processes.

e. Developer/Private Funding Reimbursement. Developers are responsible for making
improvements to their properties and the adjoining public right-of-way. Depending on the use
and circumstances, developers are sometimes required to make off-site improvements such as
extending a sidewalk and connecting it to an existing sidewalk. If a developer is required to
oversize a facility such as a storm water detention basin to accommodate additional
development, the City may set up a reimbursement program so that the developer can recover
funds as other projects use the facility.

f. General Obligation and Revenue Bonds. Bonding may be appropriate for examination as a
mechanism to finance large scale community-supported projects. General obligation bonds
are long-term obligations backed by the “full faith and credit” pledge of the city’s general fund
revenues. They carry an unlimited taxing power, require voter-approval, and are limited in
total to 3% of the city’s true cash value. Revenue bonds are long-term obligations that are
payable solely from a designated source of revenue generated by the project which was
financed. No taxing power or general fund pledge is provided as security.

g. Grants. The City should continue to pursue Metro funding for Boones Ferry Road
improvements, including MTIP funds. Additionally, grant funds made available through
federal, state, regional and county funding sources should be evaluated and pursued when
appropriate.

ix. Code Amendments - Amend City codes to reduce regulatory barriers as follows:

Parking (Policies 9.3; 9.4)

a. Reduce on-site parking requirements for parcels within the Village Center located within a
specified distance of a City parking facility. In conjunction with the development of a City
parking facility, consider a parking enhancement fee to be paid by businesses eligible for on-
site parking reductions to contribute to the facility’s enhancement and maintenance.
b. Allow parking spaces on public streets within the Village Center to meet part or all of the on-site parking requirements for adjacent business and residential uses.

Sidewalk Easement (Policy 9.1)

c. Count sidewalk easement area toward landscaping requirements and lot coverage calculations (see Transportation Action Measures (v)(a)(1)(A) Boones Ferry Corridor Improvements, Street Cross Sections, Preferred Modifications).

Access (Policies 9.1; 9.6)

d. Allow flexibility in meeting access, spacing and consolidation requirements where a raised median has been installed. See Transportation Action Measures (v)(a)(10) Boones Ferry Corridor Improvements, Parking Facilities and Access Coordination.

e. Allow flexibility in meeting access, spacing and consolidation requirements in special circumstances where the development pattern includes many small parcels and the future access pattern would require shared driveways or rear access when properties redevelop.
Signage Program (Policy 9.1)

f. Develop a signage program to meet the unique needs of businesses in the Village Center due to the implementation of the Boones Ferry Concept Plan. Possibilities to consider include: allowances for consolidated business signs at shared driveways; additional signage on the side or rear of buildings; business directories at key public locations; and modifications to signage location, height and size requirements. Consider negative impacts on adjoining residential areas in the development of the program.

Special Street Setback (Policy 9.1)

g. Establish the Boones Ferry Road special street setback to accommodate the recommended right-of-way and cross section elements (see Transportation Action Measures (v)(a)(l)(a) Boones Ferry Corridor Improvements, Street Cross Sections) after corridor design is completed. Provide for modifications based on concept refinement analyses, street design studies and engineering plans including determination of the centerline alignment (see Transportation Action Measures (i) Concept Refinement, and (ii) Street Design).

Landscape Requirements (Policy 9.1)

h. Allow flexibility in meeting landscaping requirements, while providing for high quality landscaping in predominant locations within the Village Center.
Amendments to the Lake Oswego Comprehensive Plan, Goal 12: Transportation

The Lake Oswego Comprehensive Plan is hereby amended by deleting the text shown by strikeout, adding new text shown in underline, and by revisions to Transportation System Plan maps indicated as follows:

Figure 16, Functional Classification System General Characteristics

Excerpt from complete list up to and including text amendments provided below:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Freeways</td>
<td>Intended to provide for trips between Clackamas, Washington, Multnomah Counties and other parts of the region; and between major urban areas within the Metro region.</td>
<td>I-5 I-205</td>
<td>55</td>
<td>Prohibited</td>
<td>None. Access to freeway is limited to interchanges.</td>
<td>2-3 miles</td>
<td>30,000+</td>
<td>4-8*</td>
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<tr>
<td>Major Arterials</td>
<td>Connects cities in the Metro area. They are intended to serve as the primary routes for major areas of urban activity and to access the freeway system.</td>
<td>Kruse Way Boones Fry. Rd. (South of Country Club) Country Club &quot;A&quot; Avenue Hwy. 43</td>
<td>25-45</td>
<td>Generally Prohibited**</td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

For Boones Ferry Road between Mercantile Drive and Madrona Street, minimum access spacing may be 150 feet when a center median is present, and 300 feet when a center median is not present.
**Figure 19, Public Facilities Plan: Transportation Improvement Program**

1) Add the following entry as shown.

<table>
<thead>
<tr>
<th>Map #</th>
<th>Location</th>
<th>Description</th>
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<tbody>
<tr>
<td>T-LGVC</td>
<td>Boones Ferry Road-Kruse Way to Madrona Street; Hallmark Drive</td>
<td>See Attachment B, Lake Grove Village Center Plan: Table 1. Lake Grove Village Center Transportation Projects; Figure 3.</td>
</tr>
</tbody>
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2) Add the following entry as shown.

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<tr>
<td>P-LGVC</td>
<td>Lake Grove Village Center Plan Area</td>
<td>See Attachment B, Lake Grove Village Center Plan: Table 1. Lake Grove Village Center Transportation Projects; Figure 4.</td>
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3) Amend the following entry as shown.

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<td>B-LGVC</td>
<td>Lake Grove Village Center Plan Area</td>
<td>See Attachment B, Lake Grove Village Center Plan: Table 1. Lake Grove Village Center Transportation Projects; Figure 5.</td>
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4) Amend the following entry as shown.

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</thead>
<tbody>
<tr>
<td>TR-LGVC</td>
<td>Boones Ferry Road-Kruse Way to Madrona Street</td>
<td>See Attachment B, Lake Grove Village Center Plan: Table 1. Lake Grove Village Center Transportation Projects; Figure 6.</td>
</tr>
</tbody>
</table>
Figure 20A, Roadway Improvement Plan

Amend Figure 20A, Roadway Improvement Plan to add Lake Grove Village Center Plan Area Projects (T-LGVC) as shown on map excerpt below (Boones Ferry Road - Kruse Way to Madrona Street; Hallmark Drive):
Figure 20B, Pedestrian Facilities Plan

Amend Figure 20B, Pedestrian Facilities Plan to add Lake Grove Village Center Plan Area Projects (P-LGVC) as shown on map excerpt below:
Figure 20C, Bicycle Facilities Plan

Amend Figure 20C, Bicycle Facilities Plan to add Lake Grove Village Center Plan Area Projects (B-LGVC) as shown on map excerpt below:
Figure 20D, Transit Network and Facilities Plan

Amend Figure 20D, Transit Network and Facilities Plan to add Lake Grove Village Center Plan Area Projects (T-LGVC) as shown on map excerpt below: