City of Tigard
Comprehensive Plan

City of Tigard
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Preface

The *City of Tigard Comprehensive Plan* is the primary document that guides land use decisions within the community. It outlines goals, policies, and recommended action measures that are intended to reflect the community’s values and aspirations for a broad range of matters relating to land use planning and growth management. It also aims to organize and coordinate the relationships between people, land, resources, and facilities to meet the current and future needs of Tigard.

City Council, in January 2006, directed staff to update the *City of Tigard Comprehensive Plan* as it was six years beyond the year 2000 planning horizon of the City’s original plan. Since the adoption of the plan in 1983, Tigard’s population has grown dramatically as has the community’s employment and business activity. Although minor updates have taken place over the years, in many ways the 1983 Plan does not reflect current and projected community character and conditions. Additionally, there have been changes in the social, economic, and political structure of the state and region. For these reasons, it was necessary to undertake a thorough update to ensure the Plan remains a viable tool for decision-makers and citizens to use when seeking policy direction regarding land use and Tigard’s future.

The *City of Tigard Comprehensive Plan* is required by State law and must conform to 12 of the 19 Oregon Statewide Land Use Planning Goals. Land development and related activities, including the City’s development codes, also must be consistent with adopted Comprehensive Plan goals and policies. The plan must also comply with the relevant portions of Metro’s 1998 *Urban Growth Management Functional Plan*.

To complete the update of the Plan, City staff has worked with citizen volunteers to develop draft language for the 12 Statewide Goals that the Plan addresses. The updated Plan will be divided into 12 chapters, each of which addresses one of the Statewide Goals. Each chapter will individually be taken through the legislative process, where the new language is adopted and the old language rescinded. As each new chapter is adopted, it will be placed into a new format. This is the reason there is currently two different formats to the language that you will find in the Plan.

Once all of the chapters have been adopted and the update complete, the *City of Tigard Comprehensive Plan* will be found in the new format. Until then, please be patient with the two formats and contact City staff if there are any questions.
Agricultural Lands

“The City of Tigard supports the efficient use of urban land within its City limits to help preserve designated farm lands in rural areas.”
Oregon Statewide Planning Goal 3: Agricultural Lands, requires local governments to “preserve and maintain agricultural lands.” Goal 3 states that only land that lies outside Urban Growth Boundaries can be classified as agricultural. This directs counties to identify, preserve, and maintain lands for farm use, consistent with existing and future needs for agricultural products, forest and open space, and with the state’s agricultural land use policy expressed in the Oregon Revised Statutes.

**GOAL 3 | Agricultural Lands**

“Only land that lies outside Urban Growth Boundaries can be classified as agricultural.”

The City of Tigard, which is located entirely within an Urban Growth Boundary, therefore contains no agricultural land according to the definition of Statewide Planning Goal 3. However, the City of Tigard supports the efficient use of urban land within its City limits to help preserve designated farm lands in rural areas. By encouraging compact growth within the City, Tigard can help to slow urban expansion into rural areas. Chapter 14, Urbanization, discusses appropriate and timely urban expansion.

“By encouraging compact growth within the City, Tigard can help to slow urban expansion into rural areas.”
Forest Lands

“To conserve forest lands by maintaining the forest land base.”
Oregon Statewide Planning Goal 4: Forest Lands, requires local
governments to “conserve forest lands by maintaining the forest land
base and to protect the state’s forest economy by making possible
economically efficient forest practices that assure the continuous growing and
harvesting of forest tree species as the leading use on forest land, consistent
with sound management of soil, air, water, and fish and wildlife resources, and
to provide for recreational opportunities and agriculture.”

**GOAL 4 | Forest Lands**

“The City of Tigard recognizes the importance of the management and preservation of urban trees.”

Land is considered forest land only if it was acknowledged as such when Goal 4 was adopted. The City of Tigard has not identified any forest lands within its City limits, therefore contains no commercial forestry land. For this reason, the City of Tigard has not adopted any goals or policies related to commercial forestry. However, the City of Tigard recognizes the importance of the management and preservation of urban trees, and has adopted goals and policies pertaining to trees (see Chapter 2: Land Use and Chapter 5: Natural Resources).
Environmental Quality

“Managing the effects of human impacts on air, water, and land resources.”

Air Resource Quality
Water Resource Quality
Land Resource Quality
## Adopts Amendments

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Environmental Quality addresses the quality of air we breathe, water in aquifers, wetlands, streams, and lakes and the responsible management and disposal of waste. Environmental quality is essential for a high quality of life, including a strong and sustainable economy. Therefore, Portland metropolitan area governments and agencies, in cooperation with state and federal governments, have developed systems to address urban development's impacts on air, water, and land resource quality. This includes measures to prevent environmental degradation and the need for conservation. Statewide Planning Goal 6 requires Oregon jurisdictions to adopt Comprehensive Plans that provide goals and policies as the basis to manage the impact of developments on air, water, and land resources.

**GOAL 6: Air, Water and Land Resources Quality**

“To maintain and improve the quality of the air, water and land resources of the state.”

The community's vision is for a future where the character and livability of Tigard is enhanced by the quality of the surrounding environment. The citizens know the importance of participating in regional partnerships, of ensuring the natural resource systems function to provide clean air and water, and of developing land use patterns and a multi-modal transportation system that reduces the dependency on the automobile. Furthermore, it is recognized that expected population growth in the region will require further effort and innovation to protect environmental quality.

At the local level, Tigard can protect environmental quality by ensuring its land use policies, codes, and standards are up-to-date with contemporary best management practices; that it is compliant with state and federal environmental laws and administrative rules; and that it leads by example in employing environmentally sound and sustainable practices in its municipal operations. The City also has an opportunity to inform its citizens on how changes in daily life can improve environmental quality.

**Section 1: Air Resources Quality**

Clean air is essential for human well-being. Furthermore, if a region violates federal and state clean air rules, there can be significant negative impacts on the economy as a result of mandated actions to improve air quality. To ensure access to clean air, the federal Clean Air Act was created as the primary regulatory framework for national, state, and local efforts to protect air quality. Under the Clean Air Act, the Environmental Protection Agency (EPA) is responsible for...
setting standards, known as National Ambient Air Quality Standards (NAAQS), for pollutants considered harmful to people and the environment. Air quality planning is focused on meeting the NAAQS and setting deadlines for meeting these standards.

The Oregon Department of Environmental Quality (DEQ) is responsible for protecting Oregon’s air quality by issuing permits, developing programs, and monitoring air pollution to ensure communities meet the NAAQS, and to protect Oregon’s pristine views. Air pollutants identified in the 2005 DEQ *Air Quality Report* as the greatest concern in Oregon are:

- Ground-level ozone, commonly known as smog;
- Fine particulate matter (mostly from wood smoke, other combustion sources, cars and dust);
- Hazardous air pollutants (also called Air Toxics); and
- Carbon monoxide (mostly from motor vehicles).

As air quality does not know political boundaries, regional efforts were established to monitor and plan for pollutants. The City of Tigard is part of the Portland Area Airshed (PAA), which is defined by the Metro service boundary. The DEQ is responsible for ensuring the PAA meets the national standards, and developing the necessary plans to continue compliance. Currently, the PAA meets all NAAQS standards (three-year averages are used to determine attainment/non-attainment of the standards: eight-hour ozone, particulate matter, and carbon monoxide). However, DEQ is required to develop maintenance plans for carbon monoxide and ozone to ensure continued compliance.

“At the local level, the City can have a positive impact on air quality.”

At the local level, the City can have a positive impact on air quality. Land use, transportation, and public facility planning can promote land development patterns and transportation systems that reduce dependence on the automobile. The City can coordinate with the Oregon Department of Environmental
Quality to ensure that industries requiring DEQ permits comply with state and federal regulations. Also, the City can protect existing natural areas and mature trees, and promote and participate in tree planting efforts. Vegetation has the natural ability to convert and sequester carbon dioxide, and produce oxygen. Trees and shrubs can also serve to screen and buffer dissimilar land uses, and lessen noise pollution. The City can also ensure its codes and regulations prevent and mitigate other negative air quality impacts associated with urban development such as visible emissions, odors, glare, and heat.

**KEY FINDINGS:**

- Within urban areas, air quality is often much worse along major roadways.

- DEQ has issued six active Air Contaminant Discharge Permits (ACDP) within the City to regulate minor sources of contaminant emissions.

- Motor vehicles are now the primary source of air pollution in Oregon and, due to population increases, the number of miles driven daily by Tigard residents has increased 67% since 1990.

- The primary sources of household pollutants in Tigard include wood burning fireplaces, and lawn and garden equipment.

- The Oregon Legislature adopted a number of specific measures to address air quality in the region.

- The citizens of Tigard value trees and natural resources and feel that protecting these resources will benefit the community.

**GOAL:**

6.1 Reduce air pollution and improve air quality in the community and region.

**POLICIES:**

1. The City shall require that all development complies with or exceeds regional, state, and federal standards for air quality.

2. The City shall support regional and state plans and programs to attain regional, state, and federal standards for air quality.
3. The City shall promote land use patterns which reduce dependency on the automobile, are compatible with existing neighborhoods, and increase opportunities for walking, biking, and/or public transit.

4. The City shall continue to investigate and implement practices that reduce air pollution associated with municipal operations.

5. The City shall cooperate with other public agencies to minimize localized transportation impacts to air quality through intersection improvements, access management, intelligent transportation systems, etc.

6. The City shall encourage the maintenance and improvement of open spaces, natural resources, and the City’s tree canopy to sustain their positive contribution to air quality.

7. The City shall improve the Environmental Performance Standards to minimize impacts from noise and light pollution.

8. The City shall encourage citizens to reduce air quality impacts associated with household activities.

**RECOMMENDED ACTION MEASURES:**

i. Perform a land use analysis to identify residential zones that could potentially accommodate mixed use or neighborhood commercial development.

ii. Adopt and implement development regulations that include provisions or incentives for alternative transportation use, particularly in Metro designated corridors and centers.

iii. Perform a sidewalk inventory that results in a Citywide GIS layer to be used for gap analysis, and the creation of a sidewalk improvement plan.

iv. Identify neighborhoods underserved by public transit and seek improvement to service in these areas.

v. Pursue funding for transportation related projects that would reduce congestion by improving flow, but not by increasing capacity.
vi. Expand the Free Street Tree Program by actively engaging neighborhoods and creating a pool of community volunteers to help with the plantings.

vii. Place educational materials in the schools, Tigard Public Library, and City Hall that demonstrate actions individuals can implement to help improve air quality in the community.

viii. Research light trespass regulations from other municipalities and consider developing standards for Tigard.

Section 2: Water Resources Quality

The quality of the water in our aquifers, streams, rivers, lakes, and wetlands is important to the health and welfare of the community, as well as the fish and wildlife that rely on clean water for habitat. To limit harmful impacts from human activities on water quality, the Clean Water Act (CWA) was enacted. It regulates the discharge of pollutants into waterways through National Pollutant Discharge Elimination System (NPDES) permits. In the State of Oregon, the Department of Environmental Quality (DEQ) has been charged with establishing standards, regulating, and monitoring Oregon’s waters for compliance with the CWA and NPDES.

Large municipalities typically have NPDES permits for their wastewater treatment facilities and for stormwater runoff, called a Municipal Separate Storm Sewer System (MS4) permit. In urban Washington County, which includes the City of Tigard, the permits have been combined and are held by Clean Water Services (CWS). The combined permit was issued for the entire Tualatin River watershed to guide a basin-wide effort to improve water quality. It requires CWS to submit a Stormwater Management Plan and a Wastewater Management Plan to DEQ. These two plans outline the best management practices that CWS, its member cities, and Washington County commit to employ to reduce pollutant discharges, regulate temperature, and comply with any Total Maximum Daily Load (TMDL) levels that have been established.

“To limit harmful impacts from human activities on water quality, the Clean Water Act was enacted.”
The City of Tigard is a co-implementer of the permits and associated plans through an Intergovernmental Agreement (IGA) with CWS. The IGA outlines the functions the City must perform that are critical to the operation, maintenance, and management of stormwater and wastewater facilities, and to ensure compliance with the CWA.

Separate from the NPDES permit process, Clean Water Services has developed a Surface Water Management Program to manage non-point source pollution impacts on water quality. The Healthy Streams Plan, a public education program, and watershed restoration projects are among the several activities undertaken to improve the water quality of streams and wetlands within the Tualatin River basin.

The City also has an important role in improving water quality. For example, it has committed staff and resources to implement the Healthy Streams Plan. This involves ongoing efforts to restore stream health and associated riparian areas, educating the public about how individual actions can improve water quality, and coordinating policies and actions with other jurisdictions and agencies. These actions help maintain compliance with Metro’s Urban Growth Management Functional Plan Title 13 and implement the Nature in Neighborhoods Program.

Tigard also seeks to improve water quality by adopting land use policies and regulations to prevent erosion and protect floodplains and other sensitive lands including tree groves, wetlands, and stream corridors. Land use regulations can also help reduce water pollution by reducing impervious surfaces, and requiring storm water retention and treatment on-site. In addition, the City can provide education about how low-impact development and green building techniques can conserve water and protect water quality. Furthermore, the City maintains a sewer extension program to connect properties to the City sewer system that rely on septic tanks and drain fields.

**KEY FINDINGS:**

- Water quality in the Tualatin River basin has been generally improving since the 1970s, despite continued urbanization in the watershed.

- In 2006, Oregon DEQ characterized both Fanno Creek and the Tualatin River as having “poor” water quality within the City of Tigard. However, this is an improvement from the “very poor” ranking received in 1995.
Non-point sources are the largest contributors to water pollution in both Oregon and the Tualatin River basin.

Within Tigard, run-off from impervious surfaces, pet waste, and erosion/sedimentation are the most problematic non-point sources of pollution.

To enhance water quality, the City has an active program of tree planting, water quality facility construction (vegetated swales and retention basins), and stream corridor and wetland enhancements.

The citizens of Tigard are concerned about the impact of growth on the community’s natural resources.

**GOAL:**

6.2 Ensure land use activities protect and enhance the community’s water quality.

**POLICIES:**

1. The City shall require that all development complies with or exceeds regional, state, and federal standards for water quality.

2. The City shall continue cooperation with federal, state, and regional agencies in the management of Tigard’s water resources and the implementation of plans and programs.

3. The City shall encourage the use of low impact development practices that reduce stormwater impacts from new and existing development.

4. The City shall protect, restore, and enhance, to the extent practical, the natural functions of stream corridors, trees, and water resources for their positive contribution to water quality.
5. The City shall require measures to minimize erosion and storm run-off from development sites during and after construction.

6. The City shall continue to collaborate on informing the public of techniques and practices private individuals can employ to help correct water quality issues.

7. The City shall investigate and use, to the extent practical, measures that limit the community’s effective impervious area.

8. The City shall lead by example and develop green concepts for stormwater management at City facilities.

9. The City shall encourage the Oregon Department of Transportation and Washington County to improve the quality of stormwater run-off from their facilities.

10. The City shall continue to facilitate the extension of the City’s wastewater system to neighborhoods without service within the Tigard Urban Service Area, provided:

   A. properties benefiting from the extension pay their fair share of the cost; and
   B. annexation occurs prior to any property receiving service.

RECOMMENDED ACTION MEASURES:

i. Research and implement incentives that encourage development to minimize impervious surface coverage.

ii. Continue to implement the CWS Healthy Streams Plan.

iii. Work with the Tree Board to develop an urban tree management and preservation program that increases the canopy cover in Tigard.

iv. Continue to inventory outfalls from non-treated stormwater systems, and identify alternatives for improving the water quality released from them.
v. Encourage owners of property located in the 100-year floodplain to develop a management plan that will allow for their natural function in removing pollutants from the stream system.

vi. Develop baseline measures of effectiveness for erosion control during construction.

vii. Continue a grant program that would provide funds to organizations to develop educational programs.

viii. Research the need and feasibility of public restrooms to provide sanitary facilities for the City’s homeless population.

ix. Install signage and doggie waste bags to encourage the clean up of dog waste in public parks.

x. Evaluate the City’s street cleaning practices to ensure they are performing up to their intended results.

xi. Research the feasibility of a commercial parking lot cleaning program.

xii. Inform the public about effects of flushing pharmaceuticals and develop a program to collect and properly dispose of them so they do not reach and contaminate our streams.

xiii. Research the feasibility of incentives for new development and retrofits to use green concepts during parking lot construction.

Section 3: Land Resources Quality

Modern life inevitably leads to the production of waste. From the point in time when cities are first developed, and continuing throughout their occupancy, by-products of human activity must be collected and properly disposed of to protect the health of both people and the natural environment. To accomplish this, the state of Oregon and Metro has partnered to create laws, rules, and programs to direct reduction and efficient removal of waste. The Oregon Department of Environmental Quality (DEQ) is responsible for ensuring
compliance with state rules and statutes. DEQ is also responsible for preparing the Oregon State Integrated Resource and Solid Waste Management Plan.

Within the Portland Metropolitan Region, Metro has the responsibility for oversight and management of solid waste collection and disposal. This includes the responsibility to prepare and update the Regiona l Solid Waste Management Plan. The Regional Plan establishes the framework for coordinating most solid waste collection and disposal programs, directing waste reduction and recovery efforts, identifying roles and responsibilities, and fulfilling DEQ’s requirement that the region have an overall waste reduction plan. The Regional Plan is also responsible for recommending ways to address the solid waste management impacts of future population and employment growth.

Tigard participates in Metro’s plan update process and implements the plan through the Washington County Cooperative, which includes a number of cities in Washington County. This regional collaboration is important to reducing the amount of waste generated and entering landfills.

At the local level, the City is responsible for regulating and managing solid waste and recycling collection services within the City limits, and reviewing collection rates and service standards. Garbage and recycling collection services are provided by private haulers who operate within established franchise boundaries. The City enters into franchise agreements with the private haulers for the removal of solid waste generated from residential, commercial, and industrial customers.

**KEY FINDINGS:**

- Per capita, generation of solid waste has increased annually by 3.2% over the last ten years in the Portland metropolitan region.

- The region had a 59% waste reduction rate in 2005, and has set a target of 64% by 2009.

- Tigard’s residential recycling rate was 53.5% in 2005, while the commercial recycling rate was 22.7%.

- Regionwide, there are significant opportunities for waste reduction improvements in the construction and business sectors.
• Oregon DEQ regulates hazardous waste collection, disposal, and cleanup programs. DEQ also provides education and technical programs to reduce risks associated with hazardous wastes.

• Metro maintains its own household hazardous waste recovery program in cooperation with DEQ.

• The citizens of Tigard are concerned about population increases and the impact upon the community.

GOAL:

6.3 Reduce the amount of solid waste entering landfills.

POLICIES:

1. The City shall continue collaborating with federal, state, and regional agencies in the development and implementation of solid waste management plans and programs.

2. The City shall regulate and manage solid waste and recycling collection services through franchise agreements that:

   A. ensure recycling opportunities are accessible to all households, businesses, and institutions;
   B. implement waste reduction measures through prevention and recovery efforts;
   C. remain cost effective and environmentally sensitive; and
   D. comply with applicable plans, policies, and laws.

3. The City shall collaborate with the appropriate agencies to ensure proper permitting, collection, disposal, and cleanup of hazardous wastes.

4. The City shall use public education to promote:

   A. opportunities for recycling, composting, and reuse;
   B. reduction of household hazardous waste and its proper disposal; and
   C. reduction of solid waste generated from construction and business activities.
5. The City shall reduce the amount of solid waste associated with municipal operations.

RECOMMENDED ACTION MEASURES:

i. Find long-term partners and plan a yearly E-Waste Collection Event similar to the one in September 2006.

ii. Start a composting program (including education) for City employees, including the purchasing of compostable plates, utensils, and cups.

iii. Research commercial and construction recycling programs that could be implemented in Tigard.

iv. Develop and maintain a GIS database of DEQ hazardous waste permit sites and hazardous cleanup sites.

v. Work with franchise haulers to adjust yard debris pick-up schedules to correspond with the demand during different seasons.

vi. Research the possibility of expanding the number of items that can be recycled curbside.

vii. Work with local businesses to act as collection points for household hazardous waste. For example, home centers would collect fluorescent light bulbs while paint stores would collect old, unused paint.

viii. Work with other jurisdictions to consider the creation of a countywide Office of Sustainability.
Hazards

“Protecting people and property from natural and man-made hazards.”
# Adopted Amendments

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<td>2007-0002</td>
<td>Entire chapter updated by Ordinance 07-20.</td>
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Natural features provide a community with valuable resources but, under certain conditions, these resources may also present a hazard. For example, rivers and creeks are important for storm water conveyance, wildlife habitat, and water quality. However, these resources can quickly threaten property and people unless careful planning has documented flooding risk and adequate precautions are taken. The City’s commitment to protect people and property from hazards is based on Oregon Statewide Planning Goal 7. Goal 7 lists six hazard categories to be addressed by comprehensive plans. Four of these apply to the City of Tigard: wildfire, landslides, flooding, and earthquakes. In addition, the City is also vulnerable to harm from severe weather and man-made hazards.

**GOAL 7: Areas Subject to Natural Hazards**

“To protect people and property from natural hazards.”

Tigard’s citizens value a safe community where natural resources are protected and there is minimal danger from both natural and man-made hazards. Tigard residents value the importance of natural systems in protecting the community from hazards, and additionally recognize that although landslides, earthquakes, wildfires and floods occur naturally, the effects of these events are often made worse by human activities.

Hazards can have a significant negative impact on a community’s quality of life. It is important for the Comprehensive Plan to provide policy direction on how the City will manage hazardous conditions and events. Land use planning, development regulation and emergency management play key roles in assessing and reducing the risk to people and property from hazards. It is important for local governments to have an understanding of underlying natural conditions and past event history to develop hazard mitigation and prevention programs.

**EARTHQUAKES**

Because hazards, such as earthquake faults and floodplains, extend across jurisdictional boundaries, it is essential to coordinate planning and emergency response services regionwide and with the state and federal governments.
example, due to the scale and complexity of earthquakes, Tigard coordinates with the Oregon Department of Geology and Mineral Industries (DOGAMI). In addition to DOGAMI, Tigard coordinates with Metro, Washington County, and other jurisdictions to mitigate the risk associated with an earthquake. To minimize loss of life and property from earthquakes, the City requires all new commercial, industrial, and multi-family structures to conform to Oregon Structural Specialty Code requirements, while single-family construction must conform to the Oregon One and Two Dwelling Specialty Code for seismic category D1.

**WILDFIRE**

In Tigard, wildfire is characterized by the Urban Interface Zone, or the urban-rural fringe where homes and other structures are built onto a densely forested or natural landscape. The Oregon Department of Forestry implements the Oregon Forestland-Urban Interface Fire Program, which is expected to be fully implemented by 2011, in order to protect interface communities in Oregon from wildfire. The City of Tigard works with Tualatin Valley Fire and Rescue (TVF&R) to mitigate the effects of wildfire. TVF&R is responsible for all fire prevention and education, and has the opportunity to comment on all development applications. TVF&R also maps the urban interface zone in Tigard. The Oregon Department of Environmental Quality (DEQ) controls both backyard and agricultural burning in Oregon; however, Tigard is within the DEQ permanent burn-ban area in an effort to reduce the risk of wildfire as a result of backyard burning.

**LANDSLIDES**

People and property are best protected from landslides when building structures and roads are not built within areas prone to mass movement. Although landslides are a natural geologic process, the incidence of landslides and their impacts on people can be exacerbated by human activities. Such human activities include grading for road construction and development, excavation, drainage and groundwater alterations, and changes in vegetation. The City uses steep slopes to define sensitive lands in the Community Development Code and
has special requirements for development in these areas. When LIDAR information is available the City will evaluate the effectiveness of this approach to identifying landslide hazards and limiting their impact on the community. Also, by retaining vegetation and natural drainageways in these areas, the City can work to identifying landslide hazards and limiting their impact on the community. The effects of landslides are often more widespread than the physical area they inhabit, as landslides can affect utility services, transportation systems, and critical lifelines.

**FLOODING**

Floods are influenced by a number of factors, including the amount and intensity of precipitation, geography and geology, and development activity. The City of Tigard cannot control precipitation or the community’s soil type but can control development activity which contributes to, and is affected by, flooding. The City coordinates with several agencies to mitigate the risk of flooding. The FEMA designated floodplain is used to administer the national flood insurance program (NFIP). The floodplain serves as the FEMA flood hazard regulatory area. Within this area, development activities are regulated to minimize impacts on floodwater flows and storage areas to reduce impacts from flooding events. Oregon state law regulates development within the 100-year floodplain and Tigard complies through adoption of Metro’s Urban Growth Management Functional Plan, Title 3. The Sensitive Lands chapter of the Tigard Community Development Code implements Title 3 through the Clean Water Services’ Design and Construction Standards.

“Floods can have a devastating impact on almost every aspect of the community.”

Floods can have a devastating impact on almost every aspect of the community, including private property damage, public infrastructure damage, and economic loss from business interruption. The City has been proactive in mitigating flood hazards by purchasing floodplain property. These areas, if left undisturbed, can act to store excess floodwater. The Oregon Division of State Lands (DSL), jointly with the U.S. Army Corps of Engineers, requires a permit for development within the waters of the United States. Any disturbance to a water body and its associated floodplain is covered through this process.
OTHER HAZARDS

Tigard is also at risk of non-natural or man-made hazards. Although state-wide planning goal 7 addresses natural hazards, other hazards are included in this chapter as the community is concerned about protection from non-natural hazards as well as natural hazards. Other hazards addressed by this section may include mass casualty transportation accidents, hazardous material releases, severe storms, terrorism, epidemics, and infestation. Tigard coordinates planning for non-natural hazardous occurrences with other jurisdictions and agencies from around the state.

KEY FINDINGS

- The Cascadia Subduction Zone could potentially cause a 9+ magnitude earthquake, affecting Tigard.

- Tigard is subject to more frequent shallow earthquakes (crustal fault earthquakes). These events typically do not exceed magnitude 4, but could go up to magnitude 7.

- According to DOGAMI’s relative earthquake hazard data, fifty-eight percent of the City is subject to the greatest earthquake hazard level, with an additional 21% falling into the next hazard level. These areas include developed residential and commercial areas, as well as the Washington Square Regional Center.

- Wood-frame homes tend to withstand earthquakes better than unreinforced brick buildings.

- The City of Tigard requires all new commercial, industrial, and multifamily structures to conform to Oregon Structural Specialty Code requirements, while single-family construction must conform to the Oregon One and Two Family Dwelling Specialty Code for Seismic Category D1.

- The increasing number of homes being built in the urban interface zone
is increasing the threat of wildfire in Tigard. More than 30% of all land in Tigard is vulnerable to wildfire.

- Tigard is within the Oregon Department of Environmental Quality’s permanent burn ban area, so backyard burning is not allowed anywhere within Tigard.

- The most common type of landslide in Washington County is caused by erosion.

- Landslides within Tigard have historically not caused major property damage. However, in other parts of the Portland metropolitan region they have caused considerable damage.

- It is estimated about 3% of the City's land, or 286 acres, is vulnerable to landslides.

- Human activities such as deforestation, stream alteration, and urban development within the Tualatin basin have significantly altered the hydrology of the watershed. This has resulted in increased water runoff and greater potential for flooding.

- Floods are Tigard’s most frequently occurring natural disaster.

- The 100-year floodplain includes six streams and 7.9% of all land area in Tigard.

- As of June 2006, Tigard owns 34% of the 100-year floodplain.

- Tigard residents are concerned about the effects of all other hazards on the community.

GOAL

7.1 Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.
POLICIES

1. The City shall not allow development in areas having the following development limitations except where the developer demonstrates that generally accepted engineering techniques related to a specific site plan will make the area suitable for the proposed development:

   A. areas having a severe soil erosion potential;
   B. areas subject to slumping, earth slides, or movement;
   C. areas having slopes in excess of 25%; or
   D. areas having severe weak foundation soils.

2. The City shall favor the use of non-structural approaches to hazard mitigation.

3. The City shall coordinate land use and public facility planning with public safety providers (law enforcement, fire safety, and emergency service providers) to ensure their capability to respond to hazard events.

4. The City shall design and construct public facilities to withstand hazardous events with a priority on hazard protection of public services and facilities that are needed to provide emergency response services.

5. The City shall apply and enforce the most current building code standards to protect the built environment from natural disasters and other hazards.

6. The City shall enforce standards requiring the creation and maintenance of defensible space around habitable structures located in wildfire hazard areas.

7. The City shall comply with the Federal Emergency Management Agency (FEMA) flood regulations, which include standards for base flood levels, flood proofing, and minimum finished floor elevations.

8. The City shall prohibit any land form alterations or developments in the 100-year floodplain which would result in any rise in elevation of the 100-year floodplain.

9. The City shall not allow land form alterations or development within the 100-year floodplain outside the zero-foot rise floodway unless:
A. The streamflow capacity of the zero-foot rise floodway is maintained; and
B. Engineered drawings and/or documentation shows there will be no detrimental upstream or downstream effects in the floodplain area.

10. The City shall work with Clean Water Services to protect natural drainageways and wetlands as valuable water retention areas and, where possible, find ways to restore and enhance these areas.

11. The City shall comply with Metro Title 3 Functional Plan requirements for balanced fill and removal in the floodplain.

12. The City shall encourage pervious, and minimize impervious, surfaces to reduce storm water runoff.

13. The City shall retain and restore existing vegetation with non-invasive species in areas with landslide potential to the greatest extent possible.

14. The City shall work to reduce the risk of loss of life and damage to property from severe weather events.

RECOMMENDED ACTION MEASURES

i. Place land acquisition priorities on high hazard areas to be used for recreation or open space purposes.

ii. Update and maintain accurate information regarding natural hazard risks and past events.

iii. Publicize and maintain maps of high hazard areas.

iv. Address planning for the protection of public facilities and services from hazards in the Tigard Public Facilities Plan and Community Investment Plan.

“The City shall work to reduce the risk of loss of life and damage to property from severe weather events.”
v. Retrofit existing public facilities and services to contemporary standards to better withstand natural disasters and hazardous occurrences.

vi. Recognize some existing buildings have not been built to contemporary building code standards and seek ways to encourage their retrofit to modern codes.

vii. Design and Implement a natural hazards home inspection program.

viii. Update and maintain a list of essential and critical facilities to be used in hazards planning.

ix. Work with Tualatin Valley Fire and Rescue Community Safety Program to provide information and education about urban interface wildfire to Tigard citizens.

x. Adopt the Tualatin Valley Fire and Rescue Wildfire Hazard Map and implement the Wildfire Hazard Mitigation section of the Oregon Residential Specialty Code.

xi. Provide information and access to resources for property owners who wish to assess the ability of their buildings to withstand natural hazards.

xii. Continue to maintain eligibility for the National Flood Insurance Program.

xiii. Research and implement standards to ensure only appropriate land uses are allowed in high hazard areas.

xiv. Complete the Tigard Natural Hazards Addendum to the Washington County Natural Hazards Mitigation Plan and include risk assessments and mitigation action items.

**GOAL**

7.2 Protect people and property from non-natural hazardous occurrences.
POLICIES

1. The City shall design, construct, and coordinate the surface transportation system to reduce the potential for mass casualty accidents and to provide the ability to evacuate when necessary.

2. The City shall encourage communication and coordination among a wide variety of agencies to respond to technological and man-made disasters.

RECOMMENDED ACTION MEASURES

i. Keep a current inventory of locations where hazardous materials might pose a danger to the public, including storage and transportation areas.

ii. Update and maintain the Tigard Emergency Operations Plan to ensure essential governance and public safety services are available during a disaster.

iii. Continue to work with the Washington County Office of Emergency Management to:

A. coordinate emergency preparedness education for Tigard residents;
B. provide ongoing responder training and exercises;
C. coordinate regionwide hazards response; and
D. provide hazards information and resources countywide.

iv. Continue to implement the Community Emergency Response Team (CERT) Program for community members and City staff.

v. Encourage projects that enhance medical treatment capabilities and capacity.
Parks, Recreation, Trails, and Open Space

“The community envisions a future where a wide variety of recreational opportunities are available through a diverse system of parks, trails, and open spaces.”
# Adopted Amendments

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**Parks, Recreation, Trails and Open Space**
A ccess to parks, recreation, trails, and open space enhances the livability of a community and contributes to the well-being of its residents. These amenities provide a variety of opportunities for residents and visitors to enjoy both active and passive activities, while also helping to preserve open space, wildlife habitat, and natural resources. Parks may also serve as informal meeting places to draw people together and create a sense of place. These public lands and facilities are highly appreciated by Tigard’s residents and the City is committed to their adequate provision. Statewide Planning Goal 8 requires Oregon jurisdictions to plan for recreational needs and this becomes especially important as the City begins to approach full development.

**GOAL 8: Recreational Needs**

“To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of recreational facilities, including destination resorts.”

The community envisions a future where a wide variety of recreational opportunities are available through a diverse system of parks, trails, and open spaces. This system would be distributed throughout the community and easily accessible from all neighborhoods. It includes not only developed parks, but open spaces to protect natural resources that the community holds in high regard. The citizens also know that simply planning for and providing the opportunities is not enough, but funding must be secure to properly manage and maintain the system.

The Tigard park system currently includes 169 acres of City parkland and 182 acres of greenway and other preservation-oriented sites. These figures equate to 3.7 acres of developed area and 4.0 acres of natural area per thousand residents. Most of this park and greenway land is located within the floodplain. In addition to parks and open spaces, Tigard has developed a successful trail program, consisting of 9 miles of completed trails. These trails provide both recreation opportunities and transportation links throughout the community. A major source of parkland acquisition and development funds has come from the park System Development Charge (SDC) on new development, first imposed in 1977.

The City does not sponsor a recreation program and is not served by a special park and recreation district. The *Tigard Park System Master Plan* covers the City proper and the unincorporated Urban Services Area. Subsequent to the master plan’s adoption in 1999, the City added 19.3 acres of parkland and 24.1 acres of greenway. Because of population increases during the same period, the City’s existing level of service through 2006 held steady at 7.7 acres of public parks and open space per thousand population.
KEY FINDINGS:

- The system of adding parks and related land and facilities in the City has kept up with growth in the seven years since the Park System Master Plan's adoption in 1999 (7.7 acres/1000 residents), but has not achieved the Plan’s aspirational standard.

- Many areas of the City are park deficient.

- The land supply available for parks and open space is becoming smaller and more expensive.

- Given the level of development in Tigard, sufficient land for neighborhood parks is unavailable to meet the needs of underserved residential and non-residential areas.

- Many non-City-owned lands and facilities serve the park and leisure needs of Tigard residents.

- The City lacks a trail master plan to guide the development of the trail system and facilitate progress toward its completion.

- The City has regulations in place that effectively provide for block links and pedestrian connections in new neighborhoods. However, there are significant gaps in the off-street pedestrian system within older neighborhoods.

- Citizen groups have identified a trail route within Northeast Tigard that includes on and off-street segments to connect with the City of Portland-adopted SW Communities trail network. Citizens have proposed that this route be considered for adoption into the Tigard trail plan.

- The trail officially identified by Tigard as the “Powerline Trail” is a segment of a larger inter-jurisdictional trail formally identified as the “Westside Trail” in the Metro Regional Trails Map.

- The City does not operate a recreation program and is not served by a special park and recreation district. Consequently, Tigard residents have limited opportunities to participate in recreation programs.

- Overall, City parklands are well maintained. Maintenance problems identified in the 1999 Tigard Park System Master Plan have been, or are being, addressed.
The new Park SDC methodology sets a per-project percentage limit on the use of SDC funds. Some 63% of the cost of park improvements is assigned to non-SDC funding sources. At this time, the City does not have a stable source of revenue that can be used as the companion funding source for capital projects.

Many of the projects identified in the Parks SDC parks capacity program are located in the Bull Mountain Urban Services Area, and not within the City limits.

Tigard does not have a parks foundation. Such foundations provide local governments with important additional programs to finance park and open space projects.

The City has been proactive in working with the Tigard Water District for the use of reservoir properties for open space. Partnership plans with the school district for the renovation and joint use of school playgrounds to meet neighborhood park needs have not been developed.

Volunteers annually contribute thousands of hours to Tigard’s park system, and are a non-monetary funding source for park maintenance and improvements.

In recent years, the City has developed and employed innovative methods to create more active park acreage to serve community needs. This has included making use of a state infrastructure loan program to expand Cook Park and making certain types of industrially zoned properties available for park uses.

The citizens of Tigard value pedestrian and bicycle paths in the community and support the development of a well connected network.

The citizens of Tigard value access to neighborhood parks and open space within a half mile of their homes.

The citizens of Tigard are concerned about the impact of growth on the community’s natural resources.
The citizens of Tigard are concerned about the lack of a public recreation program and the lack of an adequate number of parks in the community.

GOAL:

8.1 Provide a wide variety of high quality park and open spaces for all residents, including both:

A. developed areas with facilities for active recreation; and
B. undeveloped areas for nature-oriented recreation and the protection and enhancement of valuable natural resources within the parks and open space system.

POLICIES:

1. Tigard shall acquire, develop, and maintain a diverse system of parks, trails, open space, and recreational facilities that are safe, functional, and accessible to all of its population.

2. The City shall preserve and, where appropriate, acquire and improve natural areas located within a half mile of every Tigard resident to provide passive recreational opportunities.

3. The City shall seek to achieve or exceed the ideal park service level standard of 11.0 acres of parkland per thousand population.

4. The City shall endeavor to develop neighborhood parks [or neighborhood park facilities within other parks, such as a linear park] located within a half mile of every resident to provide access to active and passive recreation opportunities for residents of all ages.

5. The City shall develop other parks, including linear parks, special use facilities, urban plazas, skate parks, and pet areas, consistent with the descriptions and standards contained in the park system master plan.

6. The City shall acquire and manage some open spaces to solely provide protection of natural resources and other open spaces to additionally provide nature-oriented outdoor recreation and trail-related activities.
7. The City shall ensure public safety is a consideration in the planning, design, and management of parks, open spaces, and trails.

8. The City shall enforce park rules to protect public safety.

9. The City shall integrate green concepts into park and open space design, maintenance, and operations.

10. In addition to standing committees such as the Park and Recreation Advisory Board, and the Tree Board, the City shall continue to involve its residents and businesses as active participants and partners in all aspects of providing park and recreational services.

11. The City shall ensure that the community at large is adequately informed of recreation opportunities and programs; issues affecting park, open space, and recreation services; and volunteer opportunities.

12. The City shall, either directly or in coordination with other stakeholders and agencies, seek opportunities to acquire public open space.

13. The City shall build and maintain partnerships with other governmental and private agencies and organizations to optimize funding and facility resources, and improve park and recreational opportunities.

14. When considering acquisition of new parkland and open space, the City shall identify funding for required maintenance and public safety activities.

15. The City shall require all development to pay a parks system development charge or to dedicate land in lieu of a park system development charge.

16. The City shall continue to encourage and recognize the important role of volunteers and community groups in meeting City park, trail, open space, and recreation needs, and in building stewardship and promoting community pride.

“The City shall seek to establish and manage a fully functional urban forest.”
17. The City shall maintain and manage its parks and open space resources in ways that preserve, protect, and restore Tigard’s natural resources, including rare, or state and federally listed species, and provide “Nature in the City” opportunities.

18. The City shall provide funding for a high level of park, open space, and recreational facility maintenance.

19. The City shall seek to establish and manage a fully functional urban forest.

20. The City shall continue to improve access to neighborhood parks and other facilities in order to serve all citizens, regardless of ability.

21. Acceptance of any land donated for park purposes shall be based upon its usefulness and adaptability to the Park System Master Plan.

22. City-owned property may be used for private wetlands mitigation considered on a case-by-case basis.

RECOMMENDED ACTION MEASURES:

i. Review and update the Parks System Master Plan every 5 years.

ii. Develop master plans for each park that identify the locations and types of development that will occur in the park, preserve natural areas, and ensure development that promotes safe and aesthetically pleasing environments.

iii. Consider and respond to Tigard’s social and demographic characteristics, including its cultural diversity, when planning for, and investing in, park improvements.

iv. Consider the development of a partnership plan with the school district for the renovation and joint use of school grounds in park deficient areas to meet neighborhood park needs.
v. Coordinate with and support Metro, Oregon State Parks, the National Park Service, and other agencies and that provide parks, open spaces, and recreational activities in or near Tigard.

vi. Promote a safe environment in the City’s parks and open spaces through on-going contact and coordination with public safety officials.

vii. Consider the development of a marketing and communication plan to inform the public about the value of parks and the recreational services they provide.

viii. Develop and distribute maps and brochures to educate users about the park and open space system and promote appropriate use.

ix. Revise and update the Park System Development Charge (SDC) Methodology to reflect current land and development costs and to consider:

A. the development of a dependable, long term funding source, or sources, that can be used to provide the overall project costs assigned to non-SDC funding sources in the SDC study’s capital improvement program;
B. adjustments to the extraterritorial (Urban Growth Area) improvement projects identified in the SDC capital improvement program; and
C. adjustments to the SDC fee structure that reflects realistic non-SDC revenue expectations.

x. Seek timely voter approval to fund needed park and open space acquisitions and improvements.

xi. Utilize alternative methods to acquire and develop open space, parks, and trails, including local improvement districts, purchase of easements and development rights, life estates, etc.

xii. Work to increase grants and donations from new sources for operating and capital funding.
xiii. Consider the establishment of a parks foundation to assist with fund raising, acquisition, and special projects.

xiv. Explore additional ways to acknowledge and recognize sponsors and donors.

xv. Continue to use park reservation fee schedules that provide cost recovery balanced against needed services. Provide services to City residents at lower costs than to non-residents.

xvi. Continue efforts to involve the public in the allocation of, and request for, funds.

xvii. Identify funding for required maintenance and management activities when considering acquisition of new parkland and open space.

xviii. Where applicable, take into consideration the costs of public safety services when considering acquisition of new parkland and open space.

xix. Make parks, trails, and open spaces universally accessible by as many people as possible.

xx. Provide public access to public open space in ways that protect and preserve sensitive natural resources.

xxi. Continue to seek the assistance of volunteer groups to help in developing and maintaining parks, trails, and open spaces.

xxii. Create volunteer opportunities, and support those who want to participate in making ideas, projects, and events happen in their neighborhood parks.

xxiii. Develop and apply administrative policies and procedures for use of volunteer resources.

xxiv. Continue to develop and implement specific management plans and maintenance programs for the high level maintenance of all of the City’s park and open space lands.
xxv. Seek opportunities to introduce more environmentally-friendly, science-based maintenance practices, including measures to increase, re-use, and recycle programs, on-site filtration, integrated pest management, and other best management practices.

xxvi. Develop and implement an urban forestry program to improve the condition of Tigard’s urban forest through effective management decisions.

xxvii. Include natural resources surveys and monitoring in the City’s management of public open spaces and related natural resources.

xxviii. Remove and control invasive species and noxious weeds in natural areas.

xxii. Inform the public about maintenance and management requirements for the City’s various types of parks, recreation facilities, trails, and open spaces, for example, by posting maintenance plans on the City webpage.

GOAL:

8.2 Create a Citywide network of interconnected on- and off-road pedestrian and bicycle trails.

POLICIES:

1. The City shall create an interconnected regional and local system of on-and off-road trails and paths that link together neighborhoods, parks, open spaces, major urban activity centers, and regional recreational opportunities utilizing both public property and easements on private property.

2. The City shall design and build greenway trails and paths to minimize their impact on the environment, including on wildlife corridors and on rare, and state or federally listed species.
**Recommended Action Measures:**

i. Complete a trail system master plan to guide the development of the trail system and facilitate progress toward its completion.

ii. Complete a Citywide inventory and prioritization of opportunities for short pathway connections that increase bicycle and pedestrian connectivity and complement the greenway and on-street bicycle/pedestrian systems.

iii. Develop trail standards for the many trail systems, sizes, and materials needed in different settings.

iv. Add to the park system master plan map:
   
   A. The Tigard portions of two “regionally significant” trails (the Westside Trail (formerly, the Powerline Trail) and the Washington Square Loop Trail); and
   
   B. The on- and off-street route identified by the citizen groups that connects the Washington Square Loop Trail with the Portland Urban Trail Number 5, which ends at SW Dickinson and SW 65th.

v. Coordinate trail development and maintenance activities with natural resource management objectives and activities.

vi. Where appropriate, furnish trails with amenities, such as interpretive and directional signage, benches, drinking fountains, parking and staging areas, and other services.

vii. Use automated systems to systematically map and document trail easements, right-of-way dedications, proposed alignments, and current trail locations.

**Goal:**

8.3 Provide Tigard residents with access to a broad range of recreational, cultural, and educational activities.
POLICIES:

1. The City shall endeavor to establish a comprehensive recreation program.

2. The City shall identify funding to provide a broad range of recreational opportunities.

RECOMMENDED ACTION MEASURES:

i. Develop an information program to raise the public’s awareness of the importance of recreational facilities and programs to public well-being and community livability.

ii. Identify potential partners, including school districts, special service districts, private providers, etc., for the provision of recreation programs.

iii. Work with the community to assess appropriate elements for a recreation program.

iv. Consider voter approval to fund needed recreation facilities and a recreation program.

v. Assist, when appropriate, youth sports leagues and other non-profit recreation providers.
Public Facilities and Services

“The community’s vision is for a future where essential public facilities and services are readily available to serve the needs of the community.”
## Public Facilities and Services

### Adopted Amendments

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Public Facilities and Services addresses their appropriate coordination, location, and delivery in a manner that best supports the existing and proposed land uses. For the purposes of the Comprehensive Plan, Public Facilities and Services refers to Stormwater Management, Water Supply and Distribution, Wastewater Management, Community Facilities, and Private Utilities. The provision of these facilities and services is essential to a high quality of life and the health, safety, and welfare of the community. Their availability is also vital to promoting and sustaining a strong local and regional economy. For these reasons, the City and its partner agencies and districts must efficiently plan for the impacts of future growth and development on the facilities and services provided. Statewide Planning Goal 11 requires Oregon jurisdictions to adopt Comprehensive Plans that provide goals and policies as the basis to manage, maintain, and expand the public facilities and services of the community.

GOAL 11: Public Facilities and Services

“To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.”

The community’s vision is for a future where essential public facilities and services are readily available to serve the needs of the community. They understand the importance of not only planning for and funding the facilities, but ensuring their continued maintenance. They also recognize the impact that new development places upon all services and want them to pay their fair share. The public library, senior center, public safety, and public schools especially are considered vital components of a high quality, livable community. Furthermore, it is recognized that expected population growth in the region will place increased pressure on existing public facilities and services.

The City of Tigard has adopted the City of Tigard Public Facility Plan (1991) as required by Oregon Administrative Rule 660-11. The City will make appropriate updates to the Public Facility Plan on a regular basis as part of the Periodic Review process as required by Oregon Administrative Rule 660-25.

Section 1: Stormwater Management

The City stormwater infrastructure is a mix of natural and piped systems. As with most urban areas, the reliance on piped stormwater has been important to transport the water from impervious surfaces to the natural systems and move it out of the community. To ensure the system operates effectively, the natural
components must remain in good condition to meet the primary objectives of protecting water quality and flood control. To accomplish these objectives, the City collaborates with Clean Water Services (CWS) in the planning and management of the system. The plans currently used for City efforts are the CWS Stormwater Management Plan (2006), which addresses water quality protection, and Fanno Creek Watershed Management Plan (1997), which addresses flood control in the City.

The 2006 Stormwater Management Plan (SWMP) is a requirement of the combined National Pollutant Discharge Elimination System (NPDES) and Municipal Separate Storm Sewer System (MS4) permits held by CWS. The SWMP is revised on a five-year cycle and was last updated in spring 2006. To implement the plan, the City has an inter-governmental agreement (IGA) with CWS as a “self-service provider.” This designation means the City has operation and maintenance authority over storm drain systems, water quality systems, and roadside ditches under City jurisdiction. The IGA outlines the CWS work program standards that must be followed by the City.

The 1997 Fanno Creek Watershed Management Plan (Fanno Plan), prepared by CWS for all jurisdictions within the basin, is the principal plan for drainage in the City. The Fanno Plan covers 85% of Tigard (the remaining 15% of the jurisdiction drains directly to the Tualatin River) and has been adopted by the City. Included in the plan is an inventory of drainage structures, an evaluation of their adequacy of capacity, and recommended City infrastructure improvements to reduce flooding. Funding for these projects is available through the Storm Sewer Fund that results from the collection of system development charges.

In addition, the City is responsible for adopting policies and regulations that implement statewide land use goals to protect water quality and wildlife habitat. These policies and regulations must ensure that the impacts of new development on the stormwater infrastructure are minimized. One of the greatest impacts on stormwater infrastructure is the amount of impervious surface in a watershed. Impervious surfaces increase run-off into the stormwater system and increase the peak flow of storm events. Reducing the impervious surface coverage will encourage natural filtration and help to reduce the stormwater infrastructure needs, as well as reduce problems associated with scouring and erosion of stream channels from storm events.

Although CWS does not have land use authority, they have been involved in reducing the impacts of stormwater by developing the CWS Design and
Construction Standards (2007) that have been adopted by, and are implemented by, the City. A city engineer performs the task of evaluating the stormwater infrastructure design during the development review process to make sure the standards are met.

In addition to the CWS Design and Construction Standards (2007), the City has adopted voluntary habitat friendly development provisions that may be utilized during new development. The provisions seek to protect wildlife habitat that has been identified within the community and includes low impact development practices that are meant to reduce stormwater flow.

Funding for the stormwater system is generated from two sources. The first is from System Development Charges (SDCs) that are assessed on new developments that cannot provide their own water quantity and quality facilities. The money is placed in the Storm Sewer Fund and used for capital projects. The second, the Surface Water Management Fee, is a monthly charge that is collected on utility bills. The City keeps a portion of this fee for operations and maintenance of the stormwater infrastructure.

**KEY FINDINGS**

- The expansion and maintenance of stormwater infrastructure is an important factor affecting growth and development.

- Objectives of the stormwater system are the protection of water quality and flood control and are addressed through the CWS Stormwater Management Plan (2006) and the Fanno Creek Watershed Management Plan (1997).

- The City maintains stormwater pipes, catch basins, outfalls, and water quality facilities; which includes ponds, swales, filter systems, detention pipes and tanks.

- Impervious surfaces, undersized bridges and culverts, and inadequate infrastructure contribute to localized flooding.

...the City has adopted voluntary habitat friendly development provisions that may be utilized during new development.
The citizens of Tigard are concerned about population increases and the impact upon the community.

The citizens of Tigard are concerned about the impact of growth on the community’s natural resources.

The citizens of Tigard are concerned about the future of public services, which includes safety, schools and infrastructure.

**GOAL**

11.1 Develop and maintain a stormwater system that protects development, water resources, and wildlife habitat.

**POLICIES**

1. The City shall require that all new development::

   A. construct the appropriate stormwater facilities or ensure construction by paying their fair share of the cost;
   B. comply with adopted plans and standards for stormwater management; and
   C. meet or exceed regional, state, and federal standards for water quality and flood protection.

2. The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive stormwater management system.

3. The City shall require the stormwater management system to comply with all applicable federal, state, and regional regulations and programs.

4. The City shall require a property to be located within the City limits prior to receiving City stormwater services.

5. The City shall require maintenance access to all stormwater infrastructure and easements.

6. The City shall maintain streams and wetlands in their natural state, to the extent necessary, to protect their stormwater conveyance and treatment functions.
7. The City shall encourage low impact development practices and other measures that reduce the amount of, and/or treat, stormwater runoff at the source.

8. The City shall develop sustainable funding mechanisms:
   A. for stormwater system maintenance;
   B. to improve deficiencies within the existing system; and
   C. to implement stormwater system improvements identified in the Capital Improvement Plan.

RECOMMENDED ACTION MEASURES

i. Adopt natural resource and habitat friendly development standards that utilize incentives for developers to incorporate green concepts into their design.

ii. Review and modify the Community Development Code, as needed, to include effective regulations to implement the stormwater management goals and policies.

iii. Identify and map problematic stormwater drainage areas in the community.

iv. Research alternative funding strategies for use in improving identified problem stormwater drainage areas in the community.

v. Develop partnerships to produce and distribute informational materials that outline the benefits of low impact development practices and green street concepts.

vi. Develop and implement a Capital Replacement Program for the stormwater system.

“The City shall encourage low impact development practices and other measures that reduce the amount of, and/or treat, stormwater runoff at the source.”
Section 2: Water Supply and Distribution

The City of Tigard provides water to the Tigard Water Service Area. This area includes most of the City’s residents and also the City of Durham, King City, and the Bull Mountain area of unincorporated Washington County; which is represented by the Tigard Water District. The northeast corner of the City is supplied water by the Tualatin Valley Water District (TVWD), which operates independently from the City of Tigard.

The TVWD is governed by a five-member Board of Commissioners and operates under the TVWD Water Master Plan/Management Plan (2007). Tigard has no role in the operation or management of TVWD, but has collaborated with them on long-term supply studies and is also capable of sharing water in emergency situations.

The City of Tigard took over the provision of water to the Tigard Water Service Area from the Tigard Water District in 1994. During the transfer of supply responsibilities, an IGA created oversight for the water system through the Intergovernmental Water Board (IGWB), which consists of a member from Tigard, Durham, King City, Tigard Water District, and one at-large member. The IGWB advises Tigard City Council on issues relating to rate setting and water supply.

The City owns and operates the water distribution system under license from the Oregon Department of Human Services and the Oregon Water Resources Department. The Water Distribution Hydraulic Study (2000) is the current master plan for the City water supply system. The study provides direction for system improvements, including storage and distribution.

Although the City owns a few wells, nearly 90% of the water supply is purchased from wholesale water providers such as the Portland Water Bureau (PWB). The
City signed a 10-year agreement in summer 2006 to continue purchasing water from PWB. In addition, the City purchases water from the City of Lake Oswego, which draws its water from the Clackamas River Basin. This lack of a City-owned supply has been identified as an important issue for the future and three long-term supply feasibility studies are in progress. The studies are in collaboration with neighboring jurisdictions and will evaluate various options for partnerships in securing a long-term supply.

During periods of high water demand, the City can supplement its supply with water from City-owned aquifer storage and recovery (ASR) wells and native groundwater wells. Additional supply is available for purchase from the Joint Water Commission (JWC). Water from the JWC is delivered via the City of Beaverton system, making it Tigard’s only fluoridated supply. The City also has system inter-ties with Tualatin and the Lake Grove Water District that allows sharing water under emergency conditions.

In 2005, the Oregon Departments of Human Services and Environmental Quality conducted a source water assessment on Tigard’s groundwater. Within the Tigard water service area, 50 sites were identified as potential sources of drinking water contamination, if managed improperly.

The City of Tigard Water System is set up as an enterprise fund. The budget needs no money from the City general fund, and operates based solely on revenue the Water System creates. System Development Charges for new construction and connections, and rates for water consumption are the two main sources of revenue for the budget.

“Although the City owns a few wells, nearly 90% of the water supply is purchased from wholesale water providers such as the Portland Water Bureau.”
KEY FINDINGS

- The expansion and maintenance of water supply and distribution infrastructure is an important factor affecting growth and development.

- Two water providers operate within the City of Tigard; this requires collaboration to define future roles.

- The City of Tigard Water Service provides potable water distributed through a network of reservoirs, pump stations, and pipes up to 36” in diameter.

- Feasibility studies will help to provide direction for the City’s long-term supply options.

- The City has experienced a decrease in total and per capita consumption from 2001 to 2005 due to repairs made in water line leaks, rising costs, and the Water Conservation Program.


- The citizens of Tigard are concerned about population increases and the impact upon the community.

- The citizens of Tigard are concerned about the future of public services, which includes safety, schools and infrastructure.

GOAL

11.2 Secure a reliable, high quality, water supply to meet the existing and future needs of the community.

POLICIES

1. The City shall prioritize securing an interest in a high quality, long-term water supply, which is financially feasible and reliable, to serve the Tigard Water Service Area.

2. The City shall develop and maintain a water system master plan to coordinate the improvement and expansion of Tigard Water Service Area infrastructure to serve current and projected demand.
3. The City shall require maintenance access to all public water infrastructure and easements.

4. The City shall coordinate with Tualatin Valley Water District to require adequate supply and pressure to meet consumption and fire protection needs for the portion of Tigard served by the District.

5. The City shall ensure Tigard Water Service operations remain financially self-supporting.

6. The City shall require all new connections within the Tigard Water Service Area to pay a system development charge.

7. The City shall comply with all state and federal laws and regulations relating to potable water.

8. The City shall require all new development needing a water supply to:
   A. connect to a public water system;
   B. pay a system development charge and other costs associated with extending service;
   C. ensure adequate pressure and volume to meet consumption and fire protection needs; and
   D. extend adequately sized water lines with sufficient pressure to the boundaries of the property for anticipated future extension.

9. The City shall encourage water conservation through informational programs and maintenance of the system.

10. The City shall prohibit activities that have the potential for contamination of the municipal water supply.

RECOMMENDED ACTION MEASURES

i. Develop partnerships with neighboring jurisdictions in securing a long term water supply.
ii. Construct water distribution facilities in areas with minimal visual impact upon the community.

iii. Identify and map developed properties that are not connected to the municipal water supply.

iv. Continue funding a maintenance program that ensures adequate pressure and flow, protects water quality, and minimizes water loss.

v. Identify areas of the City with low water pressure and implement solutions to address these issues.

vi. Regularly review and update the Community Development Code as it applies to potable water.

vii. Continue producing and distributing informational materials related to water supply and conservation.

viii. Update water system development charges as needed.

ix. Research and implement a system development charge structure that doesn't penalize residential structures for installing a fire sprinkler system.

x. Develop and implement a Capital Replacement Program for the water distribution system.

xi. Survey the community to gauge their attitude regarding a fluoridated water supply.

Section 3: Wastewater Management

Wastewater services within Tigard are managed through an agreement between the City and CWS. The agreement assigns the City enforcement of design and construction standards, rules and regulations, and rates and charges governing the use of, and connection to, the wastewater system. In return, CWS acts as the regional wastewater authority that provides, owns, and maintains sewer lines with a diameter of 24 inches or greater (the City owns less than 24-inch lines), as well as pump stations and treatment facilities. CWS is also responsible for the planning of wastewater collection in the Tualatin River basin.
CWS owns and operates the Durham Wastewater Treatment Facility. The facility is operating under the basin-wide NPDES permit and is in compliance with Clean Water Act regulations. The City has an IGA with Clean Water Services to perform management and maintenance tasks on City-owned wastewater infrastructure to ensure continued compliance with the regulations.

The CWS Collection System Master Plan Update (2000) is the current plan for wastewater collection in the Tualatin basin, including the City of Tigard. The primary focus of the plan was to analyze future capacity of the system; it was found that all existing lines within the City of Tigard have adequate capacity to accommodate anticipated growth.

The City has also developed the Sanitary Sewer Facility Plan Map to help prioritize projects and schedule improvements to the system through the Capital Improvement Plan (CIP). The facility map is continuously revised, and shows the locations of all current and proposed lines within the City. The map allows the City to plan for new construction and also identify developed neighborhoods not currently being served by the wastewater system.

The Neighborhood Sewer Extension Program was established in 1996 by the City to extend public infrastructure to unconnected neighborhoods. This program encourages property owners to retire septic systems and connect to the City sewer system. The program does require property owners, upon connection, to reimburse the City for a fair share of the total cost. To encourage participation, the City also established the Neighborhood Sewer Reimbursement District Incentive Program that provides options for limiting the financial burden on the property owner.

In addition to the operation and maintenance of the existing wastewater system, the City is responsible for implementing the CWS Design and Construction Standards (2007). Land use applicants are required to obtain a Public Facility Permit when connecting to City-owned wastewater infrastructure and must
comply with the standards as part of the development review process. This function is outlined in the IGA between CWS and Tigard and is carried out by a City engineer.

Funding for the wastewater system is generated from three sources. First, developers finance the construction of new sewer lines needed to service their new developments. Secondly, during the building permit process, a connection fee is collected by the City. Most of the fee is transferred to CWS, but a portion of the fee is retained by the City for system improvements. Finally, the monthly sewer service fee is collected on the utility bill and a portion is retained by the City for operations and maintenance of the wastewater system.

**KEY FINDINGS**

- The expansion and maintenance of wastewater infrastructure is an important factor affecting growth and development.

- The City coordinates the expansion, operation, and maintenance of wastewater infrastructure through an IGA with CWS as a “self-service provider.”

- The City owns and maintains wastewater mainlines sized 6 to 21 inches in diameter.

- A number of unserved neighborhoods have been provided the opportunity to connect through the Neighborhood Sewer Extension Program. Additional neighborhoods have been identified as potential participants in the program.

- The citizens of Tigard are concerned about population increases and the impact upon the community.

- The citizens of Tigard are concerned about the impact of growth on the community’s natural resources.

- The citizens of Tigard are concerned about the future of public services, which includes safety, schools and infrastructure.
GOAL

11.3 Develop and maintain a wastewater collection system that meets the existing and future needs of the community.

POLICIES

1. The City shall require that all new development:
   A. connect to the public wastewater system and pay a connection fee;
   B. construct the appropriate wastewater infrastructure; and
   C. comply with adopted plans and standards for wastewater management.

2. The City shall continue to collaborate with Clean Water Services in the planning, operation, and maintenance of a comprehensive wastewater management system for current and projected Tigard residents.

3. The City shall require the wastewater management system to comply with all applicable federal, state, and regional regulations and programs.

4. The City shall require maintenance access to all wastewater infrastructure and easements.

5. The City shall prohibit the repair or replacement of septic tank systems within the City, to the extent it has jurisdiction, unless it is not feasible to connect to the wastewater system.

6. The City shall require a property to be located within the City limits prior to receiving City wastewater services.

7. The City shall require wastewater fees to be adequate to fund the operations and maintenance of the system.

“...The Citizens of Tigard are concerned about population increases and the impact upon the community.”
RECOMMENDED ACTION MEASURES

i. Collaborate with Washington County Department of Health and Human Services on developing an efficient protocol for notification of failed septic systems.

ii. Regularly review and update fees and charges to ensure they are sufficient to meet the needed operational costs.

iii. Identify and map properties not connected to the public wastewater system.

iv. Continue the sewer extension program in order to encourage all properties to connect to the public wastewater system.

v. Continue a proactive maintenance program to prolong the life of the infrastructure.

vi. Develop and implement a Capital Replacement Program for the wastewater collection system.

Section 4: Community Facilities

“The library offers a wide range of services and programs and acts as a community center for Tigard residents.”

The City of Tigard provides many community services, while special districts supply a portion of the facilities and services that make the community what it is today. All of these facilities and services must maintain a level of service that is adequate for the current population and, at the same time, must plan for and accommodate future growth and development within Tigard. This is why collaboration during the development process is essential to ensuring the services will be available and funding options will continue to exist with an acceptable level of service.

City-owned facilities include the Tigard Public Library, the Senior Center, and a number of administrative and equipment storage facilities. The library is a new facility that was funded by a community bond measure and opened to the public in 2004. The library offers a wide range of services and programs and acts as a community center for Tigard residents. The
library has experienced a significant increase in use since the new facility was opened.

The Senior Center is a hub of activities for the aging population in the community. Social events, classes, and meal services are a few of the offerings. Other City-owned facilities are dispersed around the community and house various City personnel and equipment. These facilities are vitally important to support the provision of public services to the community.

Two public school districts serve the City of Tigard’s school-age children: Tigard-Tualatin and Beaverton. Only Tigard-Tualatin owns property and operates schools within the Tigard City limits. Both districts have seen steady growth over the years and are an important component of reviewing development applications to ensure school capacity is not exceeded. Additionally, this working relationship is important to finding appropriate sites for new school facilities that will limit the impacts to the neighborhood and traffic flow.

Public safety is a critical component of a livable community. There must be adequate and effective services, as well as the necessary infrastructure, to respond to emergencies in a timely and efficient manner. This not only applies to the current population and built environment within the City, but also to new growth and development.

The Tigard Police Department provides police services, while Tualatin Valley Fire & Rescue (TVFR) provides fire protection and emergency services for the community. Both have an intergovernmental agreement with the Washington County Consolidated Communications Agency (WCCCA) for 911 service and public safety communications. TVFR is a fire district that covers 210 square miles, has a five-member board of directors and is funded through a permanent tax rate on properties within the district.

One way for Tigard Police and TVFR to gauge their level of service is by tracking their incident response time. Both pride themselves on quick response time to calls for service, but as development occurs, added traffic volumes and the associated congestion can cause a delay in response time. This has led to, and
will continue to lead to, the need for emergency services to expand their services and facilities in order to continue providing adequate service.

Since growth and development will impact both fire and police services, Tigard Police and TVFR have the opportunity for review and comment during the land use application process. They evaluate proposed projects to ensure an adequate level of service exists for the development, and no impediments will occur to hamper the ability to perform their functions. For TVFR, street design and placement is very important for access and egress of its equipment. A well connected street network is also essential to improving response times, for both fire and police services. During the land use application process, TVFR reviews hydrant locations, adequacy of firefighting water supplies, and viability of apparatus access to ensure meeting fire code requirements.

In addition to providing a built environment that is accessible for safety equipment, the City has adopted the Oregon statewide minimum fire code, and performs inspections on new construction. The fire code outlines the required equipment for various development types and sizes. Homeowners can voluntarily take steps to reduce risk of fire by installing equipment and providing a defensible space around structures that are located in an area at risk of wildfire.

**KEY FINDINGS**

- Growth and development will place increasing demands on the Police Department, which has an average response time that has increased by 16% over the 5 year period from 2002 to 2006.

- Areas of high population density and commercial areas, particularly Washington Square Mall, place high demands on the Tigard Police Department.

- TVFR provides fire protection services for the City through an IGA.

- The dependability of fire protection is based in part on the distribution and capacity of the City water supply.

- The City owns all fire hydrants within its boundaries.

- The community has an ISO fire insurance rating of 2, one of 15 in Oregon.
Street widths must be adequate for fire equipment access and egress, which may conflict with development that is promoting a pedestrian-friendly environment through narrower streets.

Appropriate fire detection and suppression equipment installed at the time of development is cost-effective and invaluable in reducing the community’s risk to fire.

Two public school districts serve the City of Tigard’s school-age children: Tigard-Tualatin and Beaverton. The school district boundary dates back to 1910, prior to Tigard’s incorporation.

In both 1993 and 2006 City surveys, Tigard residents named schools, education or school funding as top issues for the community (ranking 6th and 4th, respectively).

TTSD owns a number of properties in Tigard. The Beaverton School District does not own any property within Tigard.

TTSD estimates slow steady growth: 4.6% rate by 2010, with no additional schools planned for City limits.

Beaverton School District is experiencing rapid growth and is looking for land for a future school in the southwestern quadrant of their district, which includes schools attended by Tigard residents.

The new library has experienced increased usage (80% increase in visits from 1996 to 2006) since its completion, and as growth and development occur in the community, additional pressure will be put on the services offered.

The library is valued as a community center for public meetings and other events.

Although not all City departments are directly involved in land use planning, their provision of services is affected by growth and development. These impacts on government services must be considered during the land use application process, as well as additional facilities that would be needed to house them.
- City sustainability programs will be evaluated for inclusion in the Capital Improvement Plan and may have an impact on future building renovations as it relates to the *Tigard Community Development Code*.

- The citizens of Tigard are concerned about population increases and the impact upon the community.

- The citizens of Tigard are concerned about the future of public services, which includes safety, schools and infrastructure.

**GOAL**

11.4 Maintain adequate public facilities and services to meet the health, safety, education, and leisure needs of all Tigard residents.

**POLICIES**

1. The City shall support the provision of accessible public facilities and services through ensuring adequate administrative and general governance services.

2. The City shall continue to develop and maintain a Capital Improvement Plan to help provide for the orderly provision of public facilities and services.

3. The City shall coordinate the expansion and equitable, long-term funding of public facilities and services with the overall growth of the community.

4. The City shall require that all new development:
   
   A. can be provided fire and police protection;
   B. provide Tigard Police, Tualatin Valley Fire and Rescue, and the school districts the opportunity to comment on the proposal;
   C. have sufficient fire hydrants and fire flow;
   D. have a street layout and design that is accessible by emergency vehicles; and
   E. have buildings that meet fire and building code requirements.

5. The City shall work in conjunction with partner agencies and districts in the planning and locating of their new facilities.
6. The City shall provide library services that are accessible to the community and are sufficient to meet user demands.

7. The City shall coordinate with the school districts to address capacity needs associated with population growth.

8. The City shall locate appropriate municipal administration offices and services in downtown Tigard.

9. The City shall ensure the Senior Center is accessible and available to serve the needs of the aging population in the community.

10. The City shall:

A. plan for and provide sufficient resources to respond to emergencies;
B. coordinate and collaborate with the appropriate jurisdictions, agencies, and districts for emergency response;
C. participate in emergency preparedness exercises on a periodic basis; and
D. maintain an Emergency Operations Plan that is updated on a regular basis.

RECOMMENDED ACTION MEASURES

i. Continue using the 5-year planning period as the foundation of the Capital Improvement Plan and continue implementing the Council approved projects each fiscal year.

ii. Work with public safety agencies and districts to protect their ability for continued service provision.

iii. Review the Community Development Code to identify locational barriers to constructing new schools and fire stations.

iv. Research and identify funding sources to maintain and expand City services.
v. Use current and future technologies to educate, alert, warn, and direct citizens to action in the event of major emergencies and disasters.

vi. Work with Tualatin Valley Fire and Rescue to inform the community about the risks of urban interface wildfire.

vii. Plan and locate emergency evacuation routes outside of flood prone areas.

viii. Implement and update the 20-year Facility Plan for the continued stewardship of public buildings.

Section 5: Private Utilities

Telecommunications, electricity, video, and natural gas service are provided to residents and business owners within the City of Tigard by private utilities. These private utilities pay an annual right-of-way usage fee to the City as outlined in the Tigard Municipal Code. This protects the public’s past and ongoing investments in rights-of-way and other public lands. The fee also adheres to an equity principle that private companies should pay for the privilege of using public property to conduct business, just as they pay for the privilege of using private property to conduct business.

The services provided by these private companies and the associated infrastructure are essential to the community. As growth and development occurs within the community, the City must require that these services are available and coordinate their extension during the development process, while at the same time protecting the primary intended use of public rights-of-way and other public properties. This coordination and cooperation between the various entities helps to avoid conflict with current and planned infrastructure in the right-of-way and provides fair opportunity to access the right-of-way. Additionally, uncoordinated utility installations in the public right-of-way may result in multiple street cuts and increased public costs to maintain curbs, gutters, streets, and sidewalks.

The placement of utilities in the public right-of-way is regulated by the Tigard Community Development Code. During the development review process, a city engineer approves plans showing the location of utilities. New development is typically required to place utilities underground unless they are already in existence above ground, or where the action would not be feasible. In certain cases, where undergrounding is not feasible and the utility crosses or is adjacent to a public right-of-way, an in-lieu of fee may be assessed and placed into a fund that is used to move existing utilities underground elsewhere in the City.
The City has also recognized the demand for wireless communication services and adopted regulations for the facilities necessary to provide them. The infrastructure needed to support the services has a visual impact upon the community and collocation efforts are encouraged by the City to minimize that impact. Collocation is the practice of placing the communication equipment of two or more companies on one structure (wireless tower).

**KEY FINDINGS**

- Telecommunications, electricity, video, and natural gas service are provided to residents and business owners within the City of Tigard by private utilities. These private utilities pay an annual right-of-way usage fee to the City as outlined in the *Tigard Municipal Code*.

- As growth and development occurs within the community, the City must ensure that private utility services are available and coordinate their extension during the development process.

- Collocation of wireless communication equipment and the location of the towers upon which the equipment resides have a direct visual impact upon the community.

- As an equity principle, private companies should pay for the privilege of using public property to conduct business.

- A key task of the City is to protect the public's investments and the primary intended use of these assets.

**GOAL**

11.5 Private utilities provide the needed energy and communication services for the community.

**POLICIES**

1. The City shall require that all new development:
   
   A. secure the required energy and communication utilities;
B. place new utilities underground, when feasible, or pay an in-lieu-of fee when crossing or adjacent to a public right-of-way; and
C. provide necessary easements for energy and communication services.

2. The City shall require the placement of existing services underground, when feasible, or pay an in-lieu-of fee during redevelopment or street construction.

3. The City shall coordinate with private utilities during installation to minimize public costs to maintain curbs, gutters, streets, and sidewalks.

4. The City shall require the collocation of wireless communication services on existing towers whenever possible.

5. The City shall manage the siting of wireless communication towers to minimize visual impacts on the community.

6. The City shall manage private utility use of the public rights-of-way and other public lands to:

   A. protect the primary intended use of these assets;
   B. provide fair opportunity to access these assets, including those involved in emerging technologies;
   C. protect the public’s past and ongoing investments by assessing sufficient charges for the privilege of using these public assets; and
   D. ensure the community has equitable access to essential private utilities.

RECOMMENDED ACTION MEASURES

i. Identify and map areas that are conducive to using in-lieu-of fees for placing utility lines underground during City projects.

ii. Continue implementing no-pavement-cut policies on identified streets.

iii. Review and improve the protocol for collocating wireless communication services.

iv. Research the feasibility of and survey the community support for a City-owned wireless internet cloud.
Energy Conservation

“Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles.”
# Energy Conservation

## Adopted Amendments

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Our way of life is powered by energy. From the construction process to home heating to getting around the community, affordable and reliable energy sources are counted upon to sustain our needs. Energy also drives the economy and has a significant impact on the environment. These roles are important to consider when planning for future sources, distribution, conservation efforts, land use, transportation, and development patterns. The City’s commitment to manage land use to conserve energy is based on Oregon Statewide Planning Goal 13.

**GOAL 13: Energy Conservation**

“Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based on sound economic principles.”

Tigard residents envision a future where access to reliable energy supplies and their use do not degrade the environmental quality of the community. They recognize the importance of renewable energy resources for the economy, the value in conservation efforts, and the significance of land use and transportation planning on energy consumption. Public transportation and a well-connected bicycle and pedestrian network are services greatly supported by the community. The community also recognizes that the City can employ new techniques and technologies in municipal operations, as well as encouraging citizens to take a personal interest in energy consumption and conservation.

The City of Tigard currently has no energy resources and no future plans to develop any generation or supply facilities. The Oregon Department of Energy (DOE) has taken the statewide lead by planning to ensure an adequate, affordable, and clean energy supply is available for Oregonians. The DOE produces the *Oregon Energy Plan* on a biennial basis. It assesses energy demand and supply in the state, identifies issues affecting energy, and presents an action plan to meet the goals of the plan.

Energy conditions and future issues identified by the 2005-2007 *Oregon Energy Plan* include:

- Unstable energy pricing and supply will continue to affect communities as it did in 2002 when Oregonians spent 50% more per unit of energy to heat their homes than in 1998.

- World oil production may peak in the next decade and begin a long-term decline. Coupled with a growth in worldwide demand, peak oil will maintain or increase already high oil prices.
Natural gas supplies from North America are declining, while prices have doubled in the past five years. Worldwide competition for the gas is also expected to increase.

To address these issues, the Oregon Energy Plan recommends conservation efforts for households, businesses, industry, and transportation, as well as developing clean and renewable energy resources. These efforts can provide insulation from, and reduce the community’s vulnerability to, volatile pricing and supplies. They are also consistent with statewide planning Goal 13 for maximizing the conservation of all forms of energy. Building efficiency standards, the Leadership in Energy and Environmental Design (LEED) rating system, and weatherization programs are options for promoting energy conservation in buildings. Metro’s Regional Transportation Plan (RTP) is required to address energy conservation, efficiency, and alternative transportation options under state and federal law. Options include driving less, buying fuel-efficient vehicles, or using alternative fuels.

Tigard has the ability to affect energy conservation efforts through developing efficient land use and transportation plans that reduce automobile trips. This includes promoting compact mixed use communities, and transit use and development. The City can lead by example in utilizing alternative energies and becoming more energy efficient in municipal operations. Tigard can also challenge residents to reach energy conservation goals set by the community.

**KEY FINDINGS:**

- Transportation is the largest use of energy in the state at 38%. A considerable reduction in energy use can be made with individuals altering their habits related to the use of motor vehicles.
The City has no energy generation or supply facilities and therefore the community’s energy supply and pricing is controlled by forces beyond its direct influence.

A number of alternative fuel options exist for motor vehicles, but supplies and availability are limited.

Large energy uses which the City has control over include street lighting, water transfer pumps, heating and cooling of municipal buildings, and the motor vehicle pool.

Solar-generated power and wood heating are the two most common options available to the community for producing their own energy. Wood heating can be problematic to air quality due to the release of fine particulate matter.

Weatherization, energy efficient building materials and appliances, and alternative energy sources can all reduce energy consumption in buildings.

The citizens of Tigard value pedestrian and bicycle paths in the community and support the development of a well connected network.

The citizens of Tigard value access to bus service in the community.

The following land use planning strategies can result in a more energy-efficient community:

A. establishing mixed-use zones to encourage working, living, and shopping in the same neighborhood;
B. providing opportunities for increased density along public transit lines;
C. support a public transit system that is reliable, connected, and efficient;
D. building a bicycle and pedestrian network that is connected, safe, and accessible;
E. connecting streets for efficiency and reducing congestion; and
F. re-use of vacant and underutilized land.

G O A L :

13.1 Reduce energy consumption.
POLICIES:

1. The City shall promote the reduction of energy consumption associated with vehicle miles traveled through:

   A. land use patterns that reduce dependency on the automobile;
   B. public transit that is reliable, connected, and efficient; and
   C. bicycle and pedestrian infrastructure that is safe and well connected.

2. The City shall implement regional and state regulations, plans, and programs that promote energy conservation.

3. The City shall require future development to consider topography, vegetation, and solar access during the design phase to reduce demands for artificial heating, cooling, and lighting.

4. The City shall implement and enforce state energy efficiency standards during the building permit review process.

5. The City shall take a leadership role in local energy matters by:

   A. designing and developing public facilities, wherever possible, that take advantage of alternative energy sources and conserve energy in operations;
   B. conducting energy audits on existing City facilities and implementing cost-effective recommendations as soon as possible;
   C. investigating and participating in, when feasible, green energy programs, which use renewable energy resources; and
   D. continuing to investigate new technologies that can reduce municipal energy consumption.
6. The City shall support energy conservation by:

   A. encouraging designs that incorporate Leadership in Energy and Environmental Design (LEED) or other accepted standards or achieve a minimum certification;
   B. informing the public about personal actions that can be taken to improve energy efficiency and reduce energy consumption;
   C. directing the private sector to the variety of available incentives programs; and
   D. providing flexibility in the land use process to take advantage of solar radiation.

**RECOMMENDED ACTION MEASURES:**

i. Create a process that requires new development to consider topography, vegetation, and solar access during the design phase.

ii. Develop target decreases for energy consumption associated with municipal operations.

iii. Purchase a percentage of Green Energy for municipal operations and then challenge the community to do the same.

iv. Research and implement incentives and development codes that would encourage energy efficiency in new developments.

v. Survey the community about energy consumption and identify top concerns that could be addressed through conservation incentives.
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Revised February 1983
Revised November 1983
Revised April 1984
Revised June 1984
Revised July 1984
Revised December 1984
Revised February 1985
Revised April 1985
Revised February 1986
Revised October 1987
Revised December 1987
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A. PURPOSE

The Comprehensive Plan is the document through which the citizens of Tigard have made the basic choices on how land development and redevelopment should occur, and how it will be managed. After many years of segmented planning, the seven separate Neighborhood Planning Organization plans comprised the communities' planning efforts. This Comprehensive Plan is intended to aggregate the communities' planning efforts into one "Community Wide Comprehensive Plan" for the Tigard Urban Planning Area.

The purpose of the plan is to maintain and improve the existing quality of life for the residents by:

1. Prohibiting development which would cause a diminution in the existing quality of life for the residents of Tigard;
2. Protecting individuals from the negative impact of developing land which has natural hazards and is subject to natural disasters;
3. Identifying and protecting resource lands from urban development encroachment;
4. Providing for the retention of natural and cultural resources which contribute to the livability of the community;
5. Providing adequate land to meet anticipated future demands for urban development in a logical and orderly manner;
6. Encouraging flexibility and innovation in development techniques to permit diversity within the community and to slow the increase in development costs;
7. Reducing the uncertainty of the development process;
8. Contributing to a healthy, stable and diversified economy within Tigard;
9. Providing for an orderly and timely arrangement and provision of public facilities and services to function as the framework for urban development; and
10. Facilitating citizen participation in all phases of the planning process.

The Tigard Comprehensive Plan is the plan on which land use decisions will be made for the area within the Tigard Urban Planning Area during the planning period (1980-2000). In areas outside the Tigard city limits, Washington County retains legal jurisdiction over development proposals and public improvement projects. The City, however, reviews and makes recommendations on proposals and projects inside the Urban Planning Area, and often coordinates with the County on related projects.

An Urban Planning Area Agreement between Tigard and Washington County regarding planning in the Tigard Urban Planning Area has been adopted. This agreement includes recognition of an Urban Planning Area boundary and related policies which are intended to:

1. Identify planning efforts for the City of Tigard and Washington County;
2. Provide for an orderly and efficient transition from urbanizable to urban land; and
3. Provide a process by which the City may expand the Urban Planning Area boundary when the City, County and affected property owners find that such an extension is necessary.

B. PLAN FORMAT

Each of the first eleven Plan Sections are organized in the following manner:

1. An introductory statement including a discussion of the intent and purpose, precedes each policy;
2. Brief statements of the findings which were developed for the factual material in the comprehensive plan resource reports;
3. The policy statements and directives to the City for making decisions and preparing plans; and
4. Implementation strategies which are recommendations and set forth the means for implementing the
plan; i.e., the preparation of specific plans, adopting of regulations, and special study commissions.

The twelfth chapter of the document contains locational criteria policies which establish standards for the designation of land use areas on the plan map and for making decisions on development proposals. These policies apply to the location of housing, commercial, industrial and public utilities and facilities.

The policies establish the limits within which land development will occur in Tigard over the planning period (from 1980-2000). They also provide the generalized framework upon which more detailed plans and implementation mechanisms will be based. These may include:

1. The application of the plan policies when reviewing development requests, i.e., subdivisions, planned developments, zoning district changes;
2. The formation of land development regulations into a unified Community Development Code;
3. The establishment of a growth management system which coordinates and evaluates a wide variety of existing mechanisms for the purpose of guiding the timing, type and location of growth;
4. The updating and yearly evaluation of the capital improvement program for the acquisition and development of public facilities and services;
5. The coordination agreements between jurisdictions and other agencies;
6. The continued work on the revitalization of Tigard's Central Business District;
7. The application of functional plans such as transportation, parks and recreation, sanitary sewers, water, etc., to urban planning and development review; and
8. The requirements of the City Charter, City ordinances, and City Council policies.

Due to the nature of the planning process, the contents of many of the chapters are interrelated with each other. No chapter is complete unto itself. Each chapter represents an aspect, from a particular point of reference, of a total system of policy direction. Thus the plan needs to be viewed and used as a whole.

The legal effects of the policies and implementation strategies are twofold:

1. They set direction for the City during the planning period; and
2. They establish the basis for an ongoing work program for the City.

Another integral aspect of the comprehensive plan is the Comprehensive Plan Map which is intended to be the visual representative of the policies and adopted land uses. Where there are apparent inconsistencies between the policies and the map, the policies shall control.

C. GOVERNMENTAL COORDINATION

The City's planning efforts include not only the City's commitmen[s] to land use planning, but also those planning and development commitments made by other governmental jurisdictions and agencies.

1. Land Conservation and Development Commission (LCDC)

State law mandates that cities and counties prepare comprehensive plans in accordance with applicable statewide land use planning goals. LCDC's land use planning goals establish a planning process and a policy framework to guide all decisions and actions related to the use of land. The City's plan is intended to be consistent with applicable LCDC goals.

2. Metropolitan Service District (MSD)

MSD, the regional planning agency, has adopted regional policy guidelines for managing growth within the regional urban growth boundary (UGB). Although these policy guidelines are not absolute requirements, they do establish objectives and targets for the region. Major identified urban growth policies are:

a. Urban Growth Boundary Findings;

b. Housing Goals and Objectives; and
c. The Regional Transportation Plan (RTP).

3. Washington County

The Urban Planning Area Agreements (UPAA), drawn between the cities and the County, identify areas of planning interest together with appropriate policy commitments (i.e., growth management strategies, annexation policies). The UPAA's provide an opportunity for the cities and the County to comment on a variety of land use actions in unincorporated Washington County.

D. HOW TO USE THE PLAN FOR LAND USE ACTIONS

1. Functions of the Plan

The plan serves an administrative as well as legislative function. With respect to administrative or quasi-judicial matters, the plan establishes a policy framework for decision making on such matters as:

a. Revisions to the Comprehensive Plan;

b. Zoning district changes;

c. Conditional developments; and

d. Subdivisions.

2. Land Use Actions - How to Use the Plan

In order to determine the effect of the plan on individual parcels of land, or on proposals for development, the following steps can be followed:

a. Determine the land use classification that applies to a specific parcel of land and read the related plan text and policies;

b. Call the City Planning and Development Department, and ask for the zoning district designation on the property by providing them with the legal description, i.e., the Section, Township, Range and Lot Number or Subdivision Name, Block and Lot Number;

c. If the plan and zoning accord with what you want to do, check with the Planning and Development Department to determine if there are any other applicable regulations; or

d. If the plan or zoning district prohibits the proposed use, request a preapplication conference with the Planning and Development Department staff for assistance in determining all of the alternative courses of action.
1. GENERAL POLICIES

The purpose of this section is to establish the relationship between the City of Tigard's Comprehensive Plan and:

2. The Regional Plan set forth by the Metropolitan Service District;
3. The Comprehensive Framework Plan and policies of Washington County;
4. The requirement that plans be updated. The plan will be updated to ensure that the plan, as the land use policy for Tigard, reflects the changing needs and circumstances of the community.

Findings

• Each plan adopted under the Land Conservation and Development Commission's Statewide Planning Goals and Guidelines must meet the following:

  1. Goal #1: Develop a citizen involvement program that ensures the opportunity for citizens to get involved in all aspects of the planning process;
  2. Goal #2: Establish a land use planning process and policy framework as the basis of all land use decisions and actions, and ensure an adequate factual data base to substantiate those decisions and actions;
  3. Goal #3: Preserve and maintain agricultural lands beyond the Urban Growth Boundary of the community;
  4. Goal #4: Conserve forest lands, not committed for urban uses, for strictly forest uses;
  5. Goal #5: Conserve open space and protect natural and service resources;
  6. Goal #6: Maintain and improve the quality of air, water and land resources;
  7. Goal #7: Protect the community's life and property from natural disaster and hazard areas;
  8. Goal #8: Meet the recreational needs of residents of the community, State, and visitors;
  9. Goal #9: Diversify and improve the economy of the community and the State;
  10. Goal #10: Provide adequate housing for the needs of the community, region and state;
  11. Goal #11: Plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as the framework for urban development;
  12. Goal #12: Provide and encourage a safe, convenient and economic transportation system;
  13. Goal #13: Conserve energy; and
  14. Goal #14: Provide for an orderly and efficient transition from urbanizable to urban land uses.

• The Metropolitan Service District established a Regional Urban Growth Boundary which includes enough land to accommodate urban needs to the year 2000. This boundary includes all of Tigard.

• The City of Tigard's Comprehensive Plan includes three parts: The first part includes the individual comprehensive plan reports (Citizens Involvement; Natural Features and Open Space; Air, Water and Land Resources; Economy; Housing; Public Facilities and Services; Transportation; Energy and Urbanization.), which constitute the findings; the second part of the plan includes the summary and policy document for the findings, polices and implementation strategies; and the third part of the plan includes the Tigard Community Development Code, which sets forth the development standards and outlines the procedures for obtaining the necessary development approvals.
• The ongoing planning program will include the preparation of a capital improvement plan outlining the major capital investments needed to realize full development of the planning area, funding sources and a budget.

POLICIES

1.1.1 THE CITY SHALL ENSURE THAT:

a. THIS COMPREHENSIVE PLAN AND ALL FUTURE LEGISLATIVE CHANGES ARE CONSISTENT WITH THE STATEWIDE PLANNING GOALS ADOPTED BY THE LAND CONSERVATION AND DEVELOPMENT COMMISSION, THE REGIONAL PLAN ADOPTED BY THE METROPOLITAN SERVICE DISTRICT;

b. ANY NEIGHBORHOOD PLANNING ORGANIZATION PLANS AND IMPLEMENTATION MEASURES ADOPTED BY THE CITY OF TIGARD AFTER THE EFFECTIVE DATE OF THIS COMPREHENSIVE PLAN ARE DESIGNED TO BE CONSISTENT WITH THIS PLAN; AND

c. THE TIGARD COMPREHENSIVE PLAN AND COMMUNITY DEVELOPMENT CODE ARE KEPT CURRENT WITH THE NEEDS OF THE COMMUNITY. IN ORDER TO DO THIS:

1. THIS PLAN SHALL BE REVIEWED AND UPDATED AT LEAST EVERY FIVE YEARS.

1.1.2 THE COMPREHENSIVE PLAN AND EACH OF ITS ELEMENTS SHALL BE OPENED FOR AMENDMENTS THAT CONSIDER COMPLIANCE WITH THE PLANS OF THE METROPOLITAN SERVICE DISTRICT (MSD) OR ITS SUCCESSOR ON AN ANNUAL BASIS, AND MAY BE SO AMENDED OR REVISED IF DEEMED NECESSARY BY THE CITY COUNCIL. ANNUAL AMENDMENT AND REVISION FOR COMPLIANCE WITH THE ABOVE REGIONAL GOALS, OBJECTIVES AND PLANS SHALL BE CONSISTENT WITH ANY SCHEDULE FOR RE-OPENING OF LOCAL PLANS APPROVED BY THE LAND CONSERVATION AND DEVELOPMENT COMMISSION (LCDC).

THIS PROVISION IS NOT TO BE CONSTRUED AS WAIVING ANY LEGAL RIGHTS WHICH THE CITY MAY HAVE TO CHALLENGE THE LEGALITY OF A REGIONAL GOAL, OBJECTIVE, OR PLAN PROVISION.

IMPLEMENTATION STRATEGIES

1. The Comprehensive Plan Future Land Use Map and the Official Zoning District map will reflect the plan policies and apply land use categories in the following manner:

a. Low Density Residential - 1 to 5 units to the net acre. The applicable zoning districts are all single family residential (R-1, R-2, R-3.5 and R-4.5).

b. Medium Density Residential - 6 to 12 units to the net acre. The applicable zoning district are multiple family (R-7 and R-12).

c. Medium - High Density Residential - 13 to 20 units to the net acre. The applicable zoning district is R-20.

d. High Density Residential - 20 to 40+ units to the net acre. The applicable zoning districts are R-20, and R-40.

e. Neighborhood Commercial - Areas of concentration of small commercial and personal service activities and related uses necessary to satisfy the daily shopping and related needs of nearby residents. The applicable zoning district is Neighborhood Commercial (C-N).

f. General Commercial - Refers to areas for auto-oriented and related commercial uses located along major trafficways. The applicable zoning district is General Commercial (C-G).
g. Commercial Professional - Areas deemed appropriate for business and professional offices and related uses. The applicable zoning district is Commercial Professional (C-P).

h. Central Business District - The area deemed appropriate for high intensity mixed use development allowing commercial, office, as well as higher density residential uses of a minimum of 40 units per acre. The applicable zoning districts are, the Central Business District (CBD) and the Special District which limits residential uses to 12 units per acre.

i. Mixed Use Employment District - Areas with a development concept that is characterized by retail, office and service commercial uses, with business park and research facilities. High density residential development will be encouraged.

j. Light Industrial - Refers to areas deemed appropriate for industrial activities which include manufacturing, processing, assembling, packaging or treatment of products from previously prepared materials and which are devoid of nuisance factors that would adversely affect other properties. The appropriate zoning districts are Light Industrial (I-L) and Industrial Park (I-P) which also permit offices and related uses.

k. Heavy Industrial - Those areas deemed appropriate for intensive manufacturing, processing, or assembly of semi-finished or finished products, including fabrication, and whose operating characteristics are potentially incompatible with most other land uses.

l. Public/Institutional - Refers to areas deemed for municipal uses, school uses or other public uses, e.g., Durham Treatment Plant.

m. Open Space - Areas designated for retention in a natural state and for development for recreational uses, e.g., floodplain, parks, etc.

n. Mixed Use Commercial District – Principle development in these areas will be high density office buildings, retail and service uses. MUC districts will encourage larger buildings with parking under, behind or alongside the structures. There are two applicable mixed use commercial zoning districts: MUC and MUC-1. A zoning designation of MUC will also allow mixed-use development and housing at densities of 50 units an acres. The Regional Center Plan recommends that land around the Washington Square Mall and land immediately west of Highway 217 be designated MUC. A zoning designation of MUC-1 will allow mixed-use development and housing at densities of 25 to 50 units an acre. The MUC-1 district is applied to the Durham Quarry site.

o. Mixed Use Residential District - The MUR designation is appropriate for predominantly residential areas where mixed uses are permitted when compatible with the residential use. Areas will be designated high density (MUR-1) or moderate density (MUR-2). Locations within the Washington Square Regional Center are appropriate for this mixed-use designation.

(Rev. Ord. 02-12)

2. The Community Development Code (C.D.C.) shall provide quasi-judicial changes to the Comprehensive Plan Map which may be initiated by affected parties on a semi-annual basis and approved if the City Council finds:

a. The change is consistent with applicable plan policies;

b. A change of physical circumstances has occurred since the original designation; or

c. A mistake was made in the original land use designation.

3. Functional master plans shall be prepared and implemented in conformance with the Comprehensive Plan and the Tigard Community Development Code.
2. CITIZEN INVOLVEMENT

This chapter addresses Statewide Planning Goal #1:

"To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process."

Tigard is now well known for its active citizen participation program; primarily with the Neighborhood Planning Organizations. Through the drafting and adoption of the Comprehensive Plan, these organizations contributed their time and energy developing Tigard's plan.

Plan policies have been prepared to preserve the continuity of Tigard's active citizen involvement program and to ensure that citizens will continue to have access to information that enables them to identify, understand, and have input into the planning issues related to implementation of the Comprehensive Plan.

Additional information on this topic is available in the "Comprehensive Plan Report: Citizens Involvement."

Findings

• Throughout the development of the Tigard Comprehensive Plan, the City has actively sought the participation of Neighborhood Planning Organizations and other citizen groups.

• The Neighborhood Planning Organizations and the Committee for Citizen Involvement met on a monthly basis throughout the Comprehensive Plan revision process.

• Continued citizen participation in all aspects of land use planning helps to ensure that City government meets the needs of Tigard's citizens.

• In order to participate in land use planning decisions, citizens need to have access to information which enables them to become aware of and informed about planning issues and City policies. It is essential that this information be made available to all citizens in an understandable form.

• Land use planning education is important to promote and stimulate interest in the citizen participation process during all phases of planning.

POLICY

2.1.1 THE CITY SHALL MAINTAIN AN ONGOING CITIZEN INVOLVEMENT PROGRAM AND SHALL ASSURE THAT CITIZENS WILL BE PROVIDED AN OPPORTUNITY TO BE INVOLVED IN ALL PHASES OF THE PLANNING PROCESS.

IMPLEMENTATION STRATEGIES

1. The City shall periodically review notification requirements and methods to determine if they adequately provide notice to affected citizens and revise these requirements and methods as necessary.

2. The City shall continue to assist and support any City Council recognized citizen group in providing adequate meeting places, distribution of materials, policy direction and staff involvement.

3. Additional citizen task forces shall be appointed by the City Council, as the need arises, to advise the City with regard to Comprehensive Plan issues.

POLICY

2.1.2 THE OPPORTUNITIES FOR CITIZEN INVOLVEMENT PROVIDED BY THE CITY SHALL BE APPROPRIATE TO THE SCALE OF THE PLANNING EFFORT AND SHALL INVOLVE A BROAD CROSS-SECTION OF THE COMMUNITY:

a. THE CITIZEN INVOLVEMENT TEAMS SHALL BE THE PRIMARY MEANS FOR CARRYING OUT THE PROGRAM;
b. WHERE APPROPRIATE, OTHER INVOLVEMENT TECHNIQUES WILL BE USED; AND

c. THE CITIZEN INVOLVEMENT TEAM FACILITATORS SHALL SERVE AS THE COMMITTEE FOR CITIZEN INVOLVEMENT AND SHALL BE RESPONSIBLE FOR EVALUATING THE CITIZEN INVOLVEMENT PROGRAM AND FOR WORKING WITH THE NEIGHBORHOOD PLANNING ORGANIZATIONS IN RECOMMENDING CHANGES IN THE PROGRAM.

IMPLEMENTATION STRATEGIES

1. The Committee for Citizen Involvement shall conduct their citizen involvement programs in accordance with the needs of the Tigard community and LCDC Goal #1 requirements. A review and evaluation of each group’s programs and processes shall be reported to the Planning Commission and City Council on a yearly basis.

2. The City Council, the Planning Commission, and the Committee for Citizen Involvement shall recommend, as needed, additional methods for involving citizens in the planning process.

POLICY

2.1.3 THE CITY SHALL ENSURE THAT INFORMATION ON LAND USE PLANNING ISSUES IS AVAILABLE IN AN UNDERSTANDABLE FORM FOR ALL INTERESTED CITIZENS.

IMPLEMENTATION STRATEGIES

1. The City shall continue to publish information on land use planning issues in a form accessible to all citizens. (Ord. 93-19)
3. NATURAL FEATURES AND OPEN SPACE

This chapter addresses a broad range of topics all having to do with the natural resources located within the Tigard Urban Planning Area. This chapter reflects the concerns expressed in several of the Statewide Planning Goals including:

Goal #5 - Open Spaces; Scenic and Historic Areas and Natural Resources; #8 - Recreational Needs.

The natural environments within the planning area offer many opportunities for a unique and healthy urban development. Those environments, when viewed as a series of systems rather than isolated features, will provide Tigard with those elements necessary for a healthy place in which to live, work and play. Floodplain greenways, for example, can provide the community with an excellent system of open space links between neighborhoods and services, in addition to providing a relatively inexpensive system for storm water runoff. It is to the community's benefit that consideration be given to both the opportunities and the limitations of the various environments within the planning area.

The natural environments included within the planning area all have their own respective limitations with regard to urbanization. Development pressure upon lands with such limitations can have profound effects on the environment. Erosion of steep slopes caused by inappropriate development, for instance, does not occur as an isolated incident. Soil type, permeability, vegetation and drainage all play major roles in and are effected by development. Likewise, the effects of inappropriate development located within the floodplain areas could have adverse effects on properties both up and down stream from the development site. The social, cultural and economic values of such resource lands could be reduced by the effects of urban development nearby. The limitations of the various environments should be considered in reviewing new development within the planning area.

The recognition of the natural environment in the planning area and the development of findings and policies which address the characteristics of the environment are extremely important elements in the Comprehensive Plan. The purpose of this chapter is to define the parameters of the various natural environments in the planning area and to identify the limitations and opportunities inherent in those environments.

Additional information on this topic is available in the "Comprehensive Plan Report: Natural Features and Open Spaces."

3.1 WETLANDS

POLICY

3.1.1 THE CITY SHALL NOT ALLOW DEVELOPMENT IN AREAS HAVING THE FOLLOWING DEVELOPMENT LIMITATIONS EXCEPT WHERE THE DEVELOPER DEMONSTRATES THAT GENERALLY ACCEPTED ENGINEERING TECHNIQUES RELATED TO A SPECIFIC SITE PLAN WILL MAKE THE AREA SUITABLE FOR THE PROPOSED DEVELOPMENT. (NOTE: THIS POLICY DOES NOT APPLY TO LANDS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP):

a. AREAS MEETING THE DEFINITION OF WETLANDS UNDER CHAPTER 18.26 OF THE COMMUNITY DEVELOPMENT CODE;

(Rev. Ord. 85-13; Ord. 84-36; Ord. 07-20)

3.2 FLOODPLAINS

3.2.1 THE CITY SHALL PROHIBIT DEVELOPMENT WITHIN AREAS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP. NO DEVELOPMENT SHALL OCCUR ON PROPERTY ADJACENT TO AREAS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP WITHIN TWENTY FIVE (25) FEET OF THE DESIGNATED WETLANDS AREA. DEVELOPMENT ON PROPERTY ADJACENT TO SIGNIFICANT WETLANDS SHALL BE ALLOWED UNDER THE PLANNED DEVELOPMENT SECTION OF THE CODE.

(Rev. Ord. 05-01; Ord. 98-19; Ord. 90-22; Ord. 85-13; Ord. 84-36; Ord. 07-20)
3.3 NATURAL RESOURCES

Findings

• Currently, there are extensive rock and gravel extraction areas located to the north and west of Tigard's planning area within Beaverton and Washington County.

(Rev. Ord. 01-07)

• There is one active mineral or aggregate resource within the Tigard Planning Area, known as the Durham Pits, which is operated by Washington County.

POLICY

3.3.1 THE CITY OF TIGARD SHALL SUPPORT THE EFFORTS OF WASHINGTON COUNTY, BEAVERTON AND THE METROPOLITAN SERVICE DISTRICT TO ENSURE THE AVAILABILITY OF THE ROCK MINERAL RESOURCES.

IMPLEMENTATION STRATEGY

1. The City shall encourage those jurisdictions regulating rock extraction to closely monitor the relationship between the demand for the resource and the amount of land planned for rock and gravel extraction and processing.

3.4 NATURAL AREAS

Findings

• There are a variety of plants, animals and water fowl within the Tigard planning area which add greatly to the quality of life within the community.

• Each species requires a complex and, often, a narrowly specific set of conditions with respect to food, water and vegetative cover or other natural features necessary for escape and reproduction.

• The significant plant communities and animal habitat areas are the riparian vegetation adjacent to the water resources in the community, and various stands of timber and brush.

• Development adjacent to existing wildlife areas can adversely affect these areas and in some instances can virtually eliminate these needed wildlife habitat areas.

• Vegetation contributes to the aesthetic quality of the community. Vegetation controls erosion, absorbs sound and moderates temperatures. It also affects the flow and moisture content of the air, reduction of air pollution and glare, and softens the impact of the urban environment.

• Statewide goal 5 requires local jurisdictions to inventory the location, quantity, and quality of resource sites located within their jurisdictions.

• The City has completed an inventory of the location and quantity of the wetland sites within its Active Planning Area. This inventory does not include information on the full range of functions and values of wetland areas as required by Goal 5 inventory standards.

• When adequate information is not available on a resource site, OAR 660-16-000 requires a local government to adopt a plan policy expressing its intent to address Goal 5 requirements relative to the site in the post acknowledgment period.

POLICIES

3.4.1 THE CITY SHALL DESIGNATE, IN ACCORDANCE WITH GOAL 5, THE FOLLOWING AS AREAS OF SIGNIFICANT ENVIRONMENTAL CONCERN.

   a. SIGNIFICANT WETLANDS;
b. AREAS HAVING EDUCATIONAL RESEARCH VALUE, SUCH AS GEOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT LANDS; AND

c. AREAS VALUED FOR THEIR FRAGILE CHARACTER AS HABITATS FOR PLANTS, ANIMAL OR AQUATIC LIFE, OR HAVING ENDANGERED PLANT OR ANIMAL SPECIES, OR SPECIFIC NATURAL FEATURES, VALUED FOR THE NEED TO PROTECT NATURAL AREAS.

3.4.2 THE CITY SHALL:

a. PROTECT FISH AND WILDLIFE HABITAT ALONG STREAM CORRIDORS BY MANAGING THE RIPARIAN HABITAT AND CONTROLLING EROSION, AND BY REQUIRING THAT AREAS OF STANDING TREES AND NATURAL VEGETATION ALONG NATURAL DRAINAGE COURSES AND WATERWAYS BE MAINTAINED TO THE MAXIMUM EXTENT POSSIBLE;

b. REQUIRE THAT DEVELOPMENT PROPOSALS IN DESIGNATED TIMBERED OR TREE AREAS BE REVIEWED THROUGH THE PLANNED DEVELOPMENT PROCESS TO MINIMIZE THE NUMBER OF TREES REMOVED; AND

c. REQUIRE CLUSTER TYPE DEVELOPMENT IN AREAS HAVING IMPORTANT WILDLIFE HABITAT VALUE AS DELINEATED ON THE "FISH AND WILDLIFE HABITAT MAP" ON FILE AT THE CITY.

d. ADDRESS GOAL 5 RULE REQUIREMENTS PERTAINING TO THE PRESERVATION OF WETLANDS ONCE ADEQUATE INFORMATION ON THE LOCATION, QUALITY, AND QUANTITY OF WETLAND SITES IS OBTAINED. THIS GOAL 5 REVIEW WILL INCLUDE DETERMINING WHICH WETLAND SITES ARE ECOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT. CITIZENS WILL PARTICIPATE IN MAKING POLICY RECOMMENDATIONS FOR THE PROTECTION AND PRESERVATION OF THOSE WETLAND AREAS DESIGNATED AS SIGNIFICANT. THE CITY SHALL COMPLETE ITS GOAL 5 REVIEW OF WETLAND AREAS BEFORE THE CITY'S NEXT PERIODIC REVIEW, BUT NO LATER THAN DECEMBER 23, 1996.

(Rev. Ord. 85-13; Ord. 93-30)

IMPLEMENTATION STRATEGIES

1. The City shall consider the inclusion of an adequate amount of land adjacent to a floodplain or drainageway for dedication to the City's natural greenway system, which allows the area to continue to support existing habitats.

2. The City shall encourage, through the Planned Development Process, the retention of large, varied habitat areas on private and public lands including inventoried plant and animal communities.

3. The City shall review all development proposals adjacent to wildlife habitat areas to ensure that adverse impacts on any wildlife habitat areas are minimized and, if need be, request that other federal, state and local agencies review the development proposals.

4. Where there exist large or unique stands of trees or major vegetation areas within the planning area on undeveloped land, the City shall ensure that development proposals do not substantially alter the character of the vegetation areas through the Planned Development Process and the "Tree Cutting" section of the Community Development Code.

3.5 PARKS, RECREATION AND OPEN SPACE

Replaced by CPA2007-00001 and Ordinance 07-22

3.6 PARK STANDARDS

Replaced by CPA2007-00001 and Ordinance 07-22
3.7  HISTORICAL-CULTURAL RESOURCES

Findings

• Historic features provide a link with the past and add character and variety to the community design. Unfortunately, much of Tigard's heritage has already been lost to unmanaged development with only a few distinct structures remaining.

• The design of developments within the community can be regarded from two viewpoints; the design of structures as they relate to site and function (architectural design), and their relationship to the surrounding area (community design). Both aspects are of equal importance.

• Good architectural design is necessary to provide visual variety and allow for individual identity. At the same time, good community design provides a sense of unity with other development while eliminating conflicting appearances.

POLICY

3.7.1  THE CITY SHALL IDENTIFY AND PROMOTE THE PRESERVATION AND PROTECTION OF HISTORICALLY AND CULTURALLY SIGNIFICANT STRUCTURE, SITE, OBJECTS AND DISTRICTS WITHIN TIGARD.

IMPLEMENTATION STRATEGIES

1. To preserve the community's history, an index of historic sites shall be developed and made available to the general public. A program shall be developed to acquire and/or restore a number of historic structures identified as significant. The City should consider the renovation of a historic structure as an historic museum or cultural center and meeting hall such as Durham School, Ye Old Windmill and John Tigard Home.
4. AIR, WATER AND LAND RESOURCES QUALITY

Replaced by CPA2007-00001 and Ordinance 07-22
5. ECONOMY

This report addresses LCDC Statewide Planning Goal #9 requirements titled "Economy of the State." The recommended findings and policies have been developed to blend Tigard's individual economic programs into those of the region and State to meet Goal #9 requirements.

The Goal #9 statement reads:

"To diversify and improve the economy of the State.

Both State and federal economic plans and policies shall be coordinated by the State with local and regional needs. Plans and policies shall contribute to a stable and healthy economy in all regions of the State. Plans shall be based on inventories of areas suitable for increased economic growth and activity after taking into consideration the health of the current economic base; materials and energy availability; labor market factors; availability of renewable and non-renewable resources; availability of land; and pollution control requirements.

Economic growth and activity in accordance with such plans shall be encouraged in areas that have underutilized human and natural resource capabilities and want increased growth and activity. Alternative sites suitable for economic growth and expansion shall be designated in such plans."

Findings

Through analysis of the economic conditions which affect Tigard, the existing make up of the community, the potential for growth, and the City's interest in assisting existing and new businesses to expand in and relocate to Tigard, the following findings were identified.

- The City of Tigard is an important economic and employment center within the Portland metropolitan economic region.
- The economic climate of the City, in part, is subject to the influences of external economic forces beyond the control of the City.
- The City continues to experience thriving commercial and industrial growth.
- In spite of continued growth and prosperity and a healthy economy overall, economic growth has had very uneven spatial impacts within the community. In particular, comparatively little new economic activity has occurred in the city center, Tigard Triangle, and 74th Avenue Corridor areas.
- Tigard has not had to induce development with financial or other incentives.
- Tigard is recognized as having clear and consistent development review standards and an efficient and well-coordinated City review process.
- A significant amount of commercial buildable land is available for development. Most of this land is concentrated in the Tigard Triangle area.
- A core problem facing the City is lack of buildable land designated for industrial use.
- The City's large industrial parks provide an ample supply of leasable space for smaller and younger industries.
- Wholesale and retail activities provide the majority of the local employment opportunities to area residents.
- An increasing regional dependence on electrical, electronic and instrument related manufacturing employment has occurred in recent years.
- There is a need for new and expanded public facilities to open areas for industrial and commercial uses. This particularly applies to the Tigard Triangle commercial and the 74th Avenue industrial areas.
- A computerized database of comprehensive and up-do-date economic data, particularly that relating to sites available for development purposes, is expected to be available from late-1990.
• The Central Business District demands attention and community support in order that improvement programs may be set in motion to make it a more diversified and economically viable core area.

• The existing railroad facilities in Tigard are utilized by some businesses located on property adjacent to the rails.

• Proximity to I-5 and Highway 217 serve as incentives to economic development in Tigard.

• Tigard’s proximity to Portland Community College provides opportunity for the creation of specialized job training programs to serve existing, expanding and new industries in the City.

• Recognizing that liveability is an important component of economic development, a need exists for more local cultural and recreational opportunities to maintain and enhance Tigard’s quality of life.

• Attractiveness or amenity of a particular area is an important factor influencing location decisions for new private sector investment.

• New water quality standards for the Tualatin River will increase the attractiveness of the river for water-based recreational activities.

• New water quality standards together with various increased development fees imposed at various times since 1983 have increased the cost of developing land.

• Traffic congestion in some designated commercial and industrial areas has been detrimental to economic development. (Rev. Ord. 91-01)

POLICIES

5.1 THE CITY SHALL PROMOTE ACTIVITIES AIMED AT THE DIVERSIFICATION OF THE ECONOMIC OPPORTUNITIES AVAILABLE TO TIGARD RESIDENTS WITH PARTICULAR EMPHASIS PLACED ON THE GROWTH OF THE LOCAL JOB MARKET.

5.2 THE CITY SHALL WORK WITH WASHINGTON COUNTY AND ADJACENT JURISDICTIONS TO DEVELOP AN ECONOMIC DEVELOPMENT PLAN INCORPORATING A LOCAL ECONOMIC DEVELOPMENT PLAN.

5.3 THE CITY SHALL IMPROVE AND ENHANCE THE PORTIONS OF THE CENTRAL BUSINESS DISTRICT AS THE FOCAL POINT FOR COMMERCIAL, HIGH DENSITY RESIDENTIAL, BUSINESS, CIVIC AND PROFESSIONAL ACTIVITY CREATING A DIVERSIFIED AND ECONOMICALLY VIABLE CORE AREA.

5.4 THE CITY SHALL ENSURE THAT NEW COMMERCIAL AND INDUSTRIAL DEVELOPMENT SHALL NOT ENCROACH INTO RESIDENTIAL AREAS THAT HAVE NOT BEEN DESIGNATED FOR COMMERCIAL OR INDUSTRIAL USES.

5.5 THE CITY SHALL PROHIBIT RESIDENTIAL DEVELOPMENT IN COMMERCIAL AND INDUSTRIAL ZONING DISTRICTS EXCEPT:

COMPLIMENTARY RESIDENTIAL DEVELOPMENT SHALL BE PERMITTED IN ALL ZONING DISTRICTS IN THE DOWNTOWN TIGARD URBAN RENEWAL DISTRICT AT APPROPRIATE DENSITIES. IN COMMERCIAL PROFESSIONAL DISTRICTS RESIDENTIAL DEVELOPMENT SHALL BE ALLOWED ABOVE THE SECOND FLOOR. (THE DENSITY IN THE COMMERCIAL PROFESSIONAL DISTRICT SHALL BE DETERMINED IN ACCORDANCE WITH THE R-40 DISTRICTS.) AND;

EXISTING SINGLE FAMILY HOMES WITHIN THE MIXED USE EMPLOYMENT ZONE SHALL BE CONSIDERED PERMITTED USES AND NEW MULTI-FAMILY DEVELOPMENT SHALL BE PERMITTED AND ENCOURAGED TO DEVELOP AT R-40 DENSITIES;

WITHIN THE MUC, MUR 1 AND 2 AND MUE 1 AND 2 ZONES WITHIN THE WASHINGTON SQUARE REGIONAL CENTER, WHERE RESIDENTIAL USES SHALL BE PERMITTED AND ENCOURAGED AT HIGH DENSITIES RANGING FROM R-25 (MUE 2 AND MUR 2) TO R-50 (MUC; MUE 1 AND MUR 1): AND
WITHIN THE MUC-1 DISTRICT, WHERE RESIDENTIAL USES SHALL BE PERMITTED AND ENCOURAGED TO DEVELOP AT A MINIMUM OF 25 UNITS PER ACRE TO A MAXIMUM OF 50 UNITS PER ACRE. RESIDENTIAL USES WHICH ARE DEVELOPED ABOVE NON-RESIDENTIAL USES AS PART OF A MIXED USE DEVELOPMENT SHALL NOT BE SUBJECT TO THESE DENSITIES.

(Rev. Ord. 01-07 & 02-12 & 07-07)

5.6 THE CITY SHALL CONSIDER PRIVATE FINANCING BY PRIVATE DEVELOPERS IN COORDINATION WITH AVAILABLE BONDING METHODS TO PROVIDE PUBLIC FACILITIES TO COMMERCIAL AND INDUSTRIAL LAND DESIGNATED ON THE COMPREHENSIVE PLAN MAP.

IMPLEMENTATION STRATEGIES

1. The City’s Community Development Code shall incorporate any revisions needed to remove unnecessary obstacles which may deter new economic activities.

2. In the process of administering the City’s Comprehensive Plan, careful consideration shall be given to the economic implications of all proposed policies, programs and regulations.

3. The City shall cooperate with the I-5 Association, the Tualatin Valley Economic Corporation, Washington County and other tiers of government on economic development activities.

4. The City, along with the business community, shall develop an economic development program aimed at attracting new commercial and industrial development to Tigard while also encouraging the expansion of existing business concerns.

5. The City shall participate in the formulation and implementation of a regional economic development program for the Washington County area.

6. The City shall continue to maintain and expand its comprehensive data base of demographic and economic information.

7. The City shall work cooperatively with the business community seeking its involvement and advice when working toward arriving at decisions having economic implications for the business community.

8. The City shall target efforts to strategic areas for growth and diversification. Specific areas include the Central Business District, the Tigard Triangle, and the 74th Avenue Industrial area.

9. The City shall concentrate resources for the revitalization of the Central Business District utilizing Local Improvement Districts and a program to encourage private investment.

10. The City shall encourage new development by allowing more flexible zoning standards within the CBD than are allowed citywide.

11. The City shall develop a master plan and financial scheme for development of the Tigard Triangle area.

12. The City shall designate SW 74th Avenue between Bonita and Durham as a special study area. Issues to be addressed include the exact location of land in floodplain, the feasibility of channelizing sections of the creek flowing through the area, and the feasibility of actively marketing suitable sites for industrial development.

13. The City shall develop and implement an economic development program compatible with the potentials and constraints of the City and will:

   a. Aid in the creation and maintenance of new and continuous employment opportunities to afford City residents the choice of working within the City;

   b. Strive to improve, diversify and stabilize the economic base of the community thus reducing the tax burden of the residential property owner;

   c. Aid in the effective utilization of the land, energy and human resources; and

   d. Provide for the timely development of all public facilities and services and their delivery systems.
14. The City shall encourage the location and development of economic activities which meet the occupational and employment needs of all City residents, particularly the unemployed and underemployed.

15. The Community Development Code shall limit development on lands planned for commercial use to commercial uses. Residential uses will be allowed above the first floor in selected zones.

16. The City shall complete the compilation of an automated inventory which identifies all parcels of land zoned for commercial or industrial purposes and which identifies:
   a. The amount and type of development on the land, if any;
   b. The name of the owner;
   c. The public services which are available to the site;
   d. The current zoning designation; and
   e. The assessed value.

17. The City shall maintain development codes which describe standards for landscaping and buffering where commercial and industrial uses abut residential districts.

18. The City shall work with Portland Community College to develop training programs as an incentive to new industries locating in Tigard needing a trained labor force.

19. The City shall coordinate its planning efforts with the Metropolitan Service District and Oregon Department of Transportation to ensure adequate access from major arterial routes to designated commercial and industrial areas.

20. The City shall encourage private landowners to consider utilizing available bonding methods, in addition to private financing methods, to provide public facilities to vacant buildable lands with the potential for industrial or commercial development.

21. The City should not preclude any financing mechanism for the implementation of its economic development objectives.

22. The City shall continue to demonstrate support for local industry Business Development Fund and Industrial Revenue bond applications for low interest financing.

23. The City shall apply for state lottery dollars for economic development projects where appropriate.

24. Within the framework of community priorities and resources, the City shall identify and apply for available park improvement and community development grants.

25. The City shall support quality of life improvements, including private sector projects that improve cultural and recreational opportunities.

26. Because highway accessibility to designated commercial and industrial areas is more important that access by any other means, the City shall actively endeavor to protect and enhance access to Highway 217 and Interstate 5.

27. Because access within an area is a significant determinant of economic location, the City shall develop and put into effect measures to reduce traffic congestion.

28. The City shall investigate ways to make Pacific Highway more visually attractive and less congested. These ways could include sidewalk, landscape, and other improvements aimed at creating more of a boulevard effect for the highway. They also could include the implementation of transportation management techniques; the adoption of site access and parking lot controls; the accomplishment, in coordination with Tri-met, of a transit improvement program; the demonstration of support for the development of a light rail line extending from downtown Portland to Tigard along Pacific Highway; and other programs and projects aimed at improving traffic circulation.

29. The City shall improve the City's economic base by encouraging development of targeted industries. (Rev. Ord. 91-01)

6. HOUSING
This chapter considers the land and the dwelling units where Tigard residents live. Residential land uses occupy more land area than any other land use in the City.

This chapter addresses the Statewide Planning Goal #10:

"To provide for the housing needs of the citizens of the State."

The plan policies focus on five basic areas: 1) Housing needs; 2) Housing costs; 3) Established residential areas; 4) Housing conditions; and 5) Urban Expansion.

Detailed information concerning housing in Tigard is available in the "Comprehensive Plan Report: Housing."

6.1 HOUSING NEEDS

Findings

• Residential housing in Tigard has been developed as 55.6% single family detached dwellings, 42.7% attached units, and 1.7% manufactured homes.

• The Metropolitan Housing Rule adopted by the Land Conservation and Development Commission states that Tigard must provide for 50% single family and at least 50% single family attached or multiple family units with a minimum of 10 units to the net acre. The Metro Housing Rule applies to only vacant buildable land within Tigard's Urban Planning Area, and does not affect established and developed residential areas.

• The rapid increase in housing and land costs over the last several years has excluded many households from obtaining suitable housing to meet their needs.

• Many of the households that do not desire or are unable to afford conventional single family detached dwellings rely on the rental market or attached dwellings to meet their housing needs.

• The rapidly changing housing market will require the City to periodically reevaluate its housing and land use objectives to provide for a variety of housing types and densities to meet the needs of future residents.

• Approximately 19% of the households in Tigard are inhabited by senior citizens.

• Undue concentrations of public assisted or subsidized housing serves to isolate the recipients of such housing from the mainstream of the community, its full range of basic services and the diversity of its neighborhoods. For this reason, the City should take steps to disperse such housing within individual neighborhoods and throughout the City itself.

POLICY

6.1.1 THE CITY SHALL PROVIDE AN OPPORTUNITY FOR A DIVERSITY OF HOUSING DENSITIES AND RESIDENTIAL TYPES AT VARIOUS PRICES AND RENT LEVELS.

(Rev. Ord. 85-03; Ord. 84-38; Ord. 84-29; Ord 96-24)

IMPLEMENTATION STRATEGIES

1. The City shall monitor the rate of development through an annual "land survey," which will function as an up-to-date inventory of land available for future residential needs.

2. The Tigard Community Development Code shall list a broad range of zoning districts which allow for a variety of housing types, and comply with the adopted Metropolitan Housing Rule (50-50 mixture of single family and attached or multiple family at 10 units to the net acre on buildable vacant land).

3. The Tigard Community Development Code, through the Planned Development process, shall establish a
procedure to allow properties exhibiting physical constraint characteristics, e.g., steep slopes or floodplains, to develop with density transfers allowable on the site.

In addition, the City shall encourage developers to use the planned development process in all developing areas.

4. The City shall allow for manufactured homes in all residential zoning districts.

5. The City shall encourage housing development to occur, to the greatest extent possible, on designated buildable lands in areas where public facilities and services can be readily extended to those lands.

6. The City shall provide for opportunities for proposals to develop specialized housing for the area's senior citizens and handicapped based on the needs of these groups by:
   a. Making information available on subsidizing programs;
   b. Allowing special use housing for these groups in all development districts;
   c. Requiring the needs of the handicapped to be considered as a part of the Site Design Review process.

7. The City shall coordinate with the Washington County Housing Authority, private non-profit housing corporations, H.U.D. and other Federal, State and regional agencies for the provision of subsidized housing programs in Tigard.

8. The City shall determine through census figures, surveys and organizational reports, such as those prepared by the area Agency on Aging, the extent of the City's need and projected need in the area of low and moderate income housing, senior housing and specialty housing. The City shall encourage the development of such housing types to meet the identified and projected needs.

9. The City shall maintain its long standing intergovernmental agreement with the Washington County Housing Authority that, among other provisions, emphasizes the supply of new Authority-owned affordable housing at dispersed sites within the community.

10. The City shall establish a fee subsidy program intended to offset fees and charges imposed on affordable housing development. The guidelines for the award of the competitive funds shall give high consideration to projects that facilitate the dispersal of affordable housing within the City.

11. The City shall encourage maintenance of a sufficient regional residential land supply.

(Rev. Ord. 04-09)

6.2 HOUSING COSTS

Findings

• The factors that have contributed to increasing housing costs are materials, labor, land costs, financing and regulation costs. (The average sales price of a new single family home increased from $22,700 in 1970 to $45,000 in 1976, to over $76,000 in 1980.)

• Land and regulation costs have dramatically increased the cost of development.

• Construction costs may be reduced by building smaller units and using alternative construction techniques.

• Excessive regulation costs can be reduced by simplifying the application process and reducing unnecessary development standards.

• Financing costs of residential units cannot be controlled by the City of Tigard; however, the City can assist in public facilities and services development through financing mechanisms.
POLICY

6.2.1 THE CITY SHALL DEVELOP CLEAR AND CONCISE DEVELOPMENT REGULATIONS AND STANDARDS TO FACILITATE THE STREAMLINING OF DEVELOPMENT PROPOSALS, AND WILL ELIMINATE UNNECESSARY PROVISIONS WHICH COULD INCREASE HOUSING COSTS WITHOUT CORRESPONDING BENEFIT.

IMPLEMENTATION STRATEGIES

1. The City shall review, revise and update the land division, zoning and sign codes. The corresponding document will be grouped in a single code and identified as the Tigard Community Development Code.

2. The Tigard Community Development Code shall include clear and concise processes for the review and approval of development proposals, to the degree that the quality of the review process is not adversely affected. This will be accomplished by, but not limited to:
   a. Administrative procedures;
   b. Application forms; and
   c. Clear and concise standards for each development process.

3. The City shall seek ways to minimize the cost of housing by encouraging a variety of home ownership alternatives such as, but not limited to, townhouses and condominiums.

4. The City shall continue to support the development of traditional housing types such as single family detached dwellings, duplexes and apartments.

5. The City shall encourage geographic flexibility in the choice of housing.

6.3 ESTABLISHED RESIDENTIAL AREAS (REPEALED BY ORDINANCE 98-19 dated 8/25/98)

6.5 HOUSING CONDITIONS

Findings

• A majority of the City’s existing units have been built since 1960; and in general, these units are in good condition.

• Most of the upkeep on these structures involves minor mechanical problems, weatherization and painting.

• The City currently does not have any rehabilitation programs for those residential structures that need major repairs. The Washington County Community Action Organization (WCCAO) does administer a weatherization program funded by the federal government to assist low income residents. Other residents of Tigard may rely on federal and State tax incentives for weatherization, as those incentives are available. As many of the existing 20 year-old homes age, more repair and rehabilitation work may be needed in order to maintain the high quality of residential structures that now exist.

• The Washington County Community Development Office operates a Home Repair Program funded by the Federal Government to assist low and moderate income homeowners. The Housing Authority of Washington County operates a Multi-Family Rental Rehabilitation Program funded by the Federal Government, to assist units occupied by low and moderate income tenants.

(Rev. Ord. 04-09)
POLICY

6.5.1 THE CITY SHALL REQUIRE THAT ALL HOUSING UNITS BE:

a. CONSTRUCTED ACCORDING TO THE OREGON UNIFORM BUILDING CODE OR OTHER APPLICABLE STATE OR FEDERAL STRUCTURAL CODES; AND

b. MAINTAINED IN A MANNER WHICH DOES NOT VIOLATE THE CITY’S NUISANCE OR PROPERTY MAINTENANCE REGULATIONS.

IMPLEMENTATION STRATEGIES

1. The Tigard Community Development Code will establish a Site Development Review, Conditional Development and Planned Development process in which to review development proposals.

2. The City will continue to administer the Uniform Building Code on all applicable types of construction in Tigard.

3. In order to insure continued safe and sanitary housing, the City shall develop a Residential Property Maintenance Code and assign a Housing Inspector to administer it.

4. To assist residents who need financing for home repairs, the City shall encourage residents to utilize the various low interest loan and grant programs offered by the Washington County Office of Community Development through its Housing Rehabilitation Program.

5. The City will enforce, where feasible, all nuisance ordinances that relate to site appearances. The City also will enforce all ordinances that relate to structural soundness. The City will encourage private property owners to comply with all nuisance and structural ordinances which will alleviate the financial burden of the City, and its taxpayers to enforce these ordinances.

6. The City will set reasonable rules in the Tigard Community Development Code for accessory buildings which will protect the character of existing residential neighborhoods.

(Rev. Ord. 04-09)

6.6 ALL AREAS

POLICY

6.6.1 THE CITY SHALL REQUIRE:

a. BUFFERING BETWEEN DIFFERENT TYPES OF LAND USES (FOR EXAMPLE BETWEEN SINGLE FAMILY RESIDENTIAL AND MULTIPLE FAMILY RESIDENTIAL, AND RESIDENTIAL AND COMMERCIAL USES, AND RESIDENTIAL AND INDUSTRIAL USES) AND THE FOLLOWING FACTORS SHALL BE CONSIDERED IN DETERMINING THE TYPE AND EXTENT OF THE REQUIRED BUFFER:

1. THE PURPOSE OF THE BUFFER, FOR EXAMPLE TO DECREASE NOISE LEVELS, ABSORB AIR POLLUTION, FILTER DUST OR TO PROVIDE A VISUAL BARRIER;

2. THE SIZE OF THE BUFFER NEEDED IN TERMS OF WIDTH AND HEIGHT TO ACHIEVE THE PURPOSE;

3. THE DIRECTION(S) FROM WHICH BUFFERING IS NEEDED;

4. THE REQUIRED DENSITY OF THE BUFFERING; and

5. WHETHER THE VIEWER IS STATIONARY OR MOBILE.
b. ON-SITE SCREENING OF SUCH THINGS AS SERVICE AREAS AND FACILITIES, STORAGE AREAS AND PARKING LOTS, AND THE FOLLOWING FACTORS, SHALL BE CONSIDERED IN DETERMINING THE TYPE AND EXTENT OF THE SCREENING:

1. WHAT NEEDS TO BE SCREENED;
2. THE DIRECTION FROM WHICH IT IS NEEDED;
3. HOW DENSE THE SCREEN NEEDS TO BE; AND
4. WHETHER THE VIEWER IS STATIONARY OR MOBILE.
5. WHETHER THE SCREENING NEEDS TO BE YEAR ROUND.
7. PUBLIC FACILITIES AND SERVICES

Replaced by CPA2007-00004 and Ordinance 07-21
8. TRANSPORTATION

This chapter addresses Statewide Planning Goal #12:

Transportation which requires local jurisdictions "to provide and encourage a safe, convenient and economic transportation system."

Transportation planning has been defined as "...the process by which transportation improvements or new facilities are systematically conceived, tested as to present and future adequacy, and programmed for future construction. Modern transportation planning emphasizes the total transportation system. It considers all modes of transport which are economically feasible to a state, region or urban area." (Goodman & Freund, Principals and Practices of Urban Planning, "Transportation Planning")

The transportation plan for Tigard reaches beyond the Tigard Planning Area and includes traffic and transportation impacts within other areas of the southwest subregion of the Portland Metropolitan Area. METRO acts as the regional coordinator for transportation planning throughout the Portland Metropolitan Area. The other major service district impacting Tigard is Tri-Met which is charged with the responsibility for providing public transportation throughout the metropolitan area.

The Comprehensive Plan proposes a land use plan that encourages and facilitates balanced transportation development for the City. The plan recognizes that land use and transportation investments are interconnected and that relationship should be reinforced to produce an acceptable urban environment.

Detailed historical information concerning transportation in the Tigard Urban Planning Area is available in the "Comprehensive Plan Report: Transportation." Detailed current information is available in the 2001 Tigard Transportation System Plan.

The 2001 Tigard Transportation System Plan updates the comprehensive plan and policies. However, it does not fully replace all elements of the comprehensive plan adopted prior to the 2001 TSP. For this reason, a new Section has been added to the beginning of the Transportation Policies Section to encompass the system wide changes developed as part of the TSP process. Some of this information is repeated and expanded upon in other policy sections. Where a policy or implementation strategy specifically conflicts with the updated TSP, the specific policy or implementation strategy has been deleted.

8.1 TRANSPORTATION SYSTEM

Findings

♦ Much of the traffic within Tigard is through traffic with origins and destinations outside of Tigard. There are no reasonable alternate routes for the 99W corridor traffic.

♦ There are 22 intersections near or at capacity based on the 2001 Tigard Transportation System Plan.

♦ There is no continuous bicycle network in Tigard.

♦ There are significant gaps in the sidewalk system with few interconnected locations linking to schools, retail, parks and transit.

♦ Segments of Highway 217 and I-5 are over capacity and ORE 99W will continue to serve more through traffic in the future.

♦ Future traffic models indicate ORE 99W and half of the signalized traffic intersections fail within 20 years assuming no improvements are made.

♦ Travel time data on Highway 217 indicates that some of the slowest travel speed on the facility occurs in Tigard due to existing capacity issues and the need for interchange improvements.

♦ In the development of the transportation system plan, seven goals were identified which were used as the guidelines for the development of the policies and implementation strategies. The goals were: livibility, balanced transportation system, safety, performance, accessibility, goods movement, and coordination.
8.1.1 PLAN, DESIGN AND CONSTRUCT TRANSPORTATION FACILITIES IN A MANNER WHICH ENHANCES THE LIVABILITY OF TIGARD BY:

a. PROPER LOCATION AND DESIGN OF TRANSPORTATION FACILITIES.

b. ENCOURAGING PEDESTRIAN ACCESSIBILITY BY PROVIDING SAFE, SECURE AND DESIRABLE PEDESTRIAN ROUTES.

c. ADDRESSING ISSUES OF EXCESSIVE SPEEDING AND THROUGH TRAFFIC ON LOCAL RESIDENTIAL STREETS THROUGH A NEIGHBORHOOD TRAFFIC PROGRAM. THE PROGRAM SHOULD ADDRESS CORRECTIVE MEASURES FOR EXISTING PROBLEMS AND ASSURE THAT DEVELOPMENT INCORPORATES TRAFFIC CALMING.

8.1.2 PROVIDE A BALANCED TRANSPORTATION SYSTEM, INCORPORATING ALL MODES OF TRANSPORTATION (INCLUDING MOTOR VEHICLE, BICYCLE, PEDESTRIAN, TRANSIT AND OTHER MODES) BY:

a. THE DEVELOPMENT OF AND IMPLEMENTATION OF PUBLIC STREET STANDARDS THAT RECOGNIZE THE MULTI-PURPOSE NATURE OF THE STREET RIGHT-OF-WAY FOR UTILITY, PEDESTRIAN, BICYCLE, TRANSIT, TRUCK AND AUTO USE.

b. COORDINATION WITH TRI-MET, AND/OR ANY OTHER TRANSIT PROVIDERS SERVING TIGARD, TO IMPROVE TRANSIT SERVICE TO TIGARD. FIXED ROUTE TRANSIT WILL PRIMARILY USE ARTERIAL AND COLLECTOR STREETS IN TIGARD. DEVELOPMENT ADJACENT TO TRANSIT ROUTES WILL PROVIDE DIRECT PEDESTRIAN ACCESSIBILITY.

c. CONSTRUCTION OF BICYCLE LANES ON ALL ARTERIALS AND COLLECTORS WITHIN TIGARD CONSISTENT WITH THE BICYCLE MASTER. ALL SCHOOLS, PARKS, PUBLIC FACILITIES AND RETAIL AREAS SHALL STRIVE TO HAVE DIRECT ACCESS TO A BIKEWAY.

d. CONSTRUCTION OF SIDEWALKS ON ALL STREETS WITHIN TIGARD. ALL SCHOOLS, PARKS, PUBLIC FACILITIES AND RETAIL AREAS SHALL STRIVE TO HAVE DIRECT ACCESS TO A SIDEWALK.

e. DEVELOPMENT OF BICYCLE AND PEDESTRIAN PLANS WHICH LINK TO RECREATIONAL TRAILS.

f. DESIGN LOCAL STREETS TO ENCOURAGE A REDUCTION IN TRIP LENGTH BY PROVIDING CONNECTIVITY AND LIMITING OUT-OF-DIRECTION TRAVEL AND PROVIDE CONNECTIVITY TO ACTIVITY CENTERS AND DESTINATIONS WITH A PRIORITY FOR BICYCLE AND PEDESTRIAN CONNECTIONS.

g. TIGARD WILL PARTICIPATE IN VEHICLE TRIP REDUCTION STRATEGIES DEVELOPED REGIONALLY TARGETED TO ACHIEVE NON-SINGLE OCCUPANT VEHICLE LEVELS OUTLINED IN TABLE 1.3 OF THE REGIONAL TRANSPORTATION PLAN.

h. TIGARD WILL SUPPORT THE DEVELOPMENT OF A COMMUTER RAIL SYSTEM AS PART OF THE REGIONAL TRANSIT NETWORK.

8.1.3 STRIVE TO ACHIEVE A SAFE TRANSPORTATION SYSTEM BY THE DEVELOPMENT OF STREET STANDARDS, ACCESS MANAGEMENT POLICIES AND SPEED CONTROLS WHEN CONSTRUCTING STREETS, AND BY MAKING STREET MAINTENANCE A PRIORITY AND THROUGH A COMPREHENSIVE PROGRAM OF ENGINEERING, EDUCATION AND ENFORCEMENT.

a. DESIGN OF STREETS SHOULD RELATE TO THEIR INTENDED USE.

b. DESIGN SAFE AND SECURE PEDESTRIAN AND BIKEWAYS BETWEEN PARKS AND OTHER ACTIVITY CENTERS IN TIGARD.
c. DESIGNATE SAFE AND SECURE ROUTES TO SCHOOLS FOR EACH SCHOOL. ANY NEW RESIDENTIAL PROJECT SHOULD IDENTIFY THE SAFE PATH TO SCHOOL FOR CHILDREN.

d. REFINE AND MAINTAIN ACCESS MANAGEMENT STANDARDS FOR ARTERIAL AND COLLECTOR STREETS TO IMPROVE SAFETY IN TIGARD.

e. ESTABLISH A CITY MONITORING SYSTEM THAT REGULARLY EVALUATES, PRIORITIZES AND MITIGATES HIGH ACCIDENT LOCATIONS WITHIN THE CITY.

f. NEW ROADWAYS SHALL MEET APPROPRIATE LIGHTING STANDARDS. EXISTING ROADWAYS SHALL BE SYSTEMATICALLY RETROFITTED WITH ROADWAY LIGHTING.

g. REQUIRE NEW DEVELOPMENT TO PROVIDE SAFE ACCESS TO AND TO GAIN SAFE ACCESS FROM A PUBLICLY DEDICATED AND IMPROVED STREET (I.E. DEDICATE RIGHT-OF-WAY, IF NOT ALREADY ON A PUBLIC STREET, AND INSTALL IMPROVEMENTS IN ROUGH PROPORTIONALITY TO THE DEVELOPMENT’S IMPACT) AND PROVIDE SAFE ACCESS.

8.1.4 SET AND MAINTAIN TRANSPORTATION PERFORMANCE MEASURES THAT:

a. SET A MINIMUM INTERSECTION LEVEL OF SERVICE STANDARD FOR THE CITY OF TIGARD AND REQUIRES ALL PUBLIC FACILITIES TO BE DESIGNED TO MEET THIS STANDARD.

b. SET PARKING RATIOS TO PROVIDE ADEQUATE PARKING, WHILE PROVIDING AN INCENTIVE TO LIMIT THE USE OF THE SINGLE OCCUPANT VEHICLE.

c. ENCOURAGE WORKING WITH OTHER TRANSPORTATION PROVIDERS IN WASHINGTON COUNTY, INCLUDING TRI-MET, METRO AND ODOT TO DEVELOP, OPERATE AND MAINTAIN INTELLIGENT TRANSPORTATION SYSTEMS, INCLUDING COORDINATION OF TRAFFIC.

8.1.5 DEVELOP TRANSPORTATION FACILITIES WHICH ARE ACCESSIBLE TO ALL MEMBERS OF THE COMMUNITY AND MINIMIZE OUT OF DIRECTION TRAVEL BY:

a. THE DESIGN AND CONSTRUCTION OF TRANSPORTATION FACILITIES TO MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.

b. THE DEVELOPMENT OF NEIGHBORHOOD AND LOCAL CONNECTIONS TO PROVIDE ADEQUATE CIRCULATION IN AND OUT OF THE NEIGHBORHOODS.

c. WORK WITH WASHINGTON COUNTY AND ODOT TO DEVELOP AN EFFICIENT ARTERIAL GRID SYSTEM THAT PROVIDES ACCESS WITHIN THE CITY, AND SERVES THROUGH CITY TRAFFIC.

8.1.6 PROVIDE FOR EFFICIENT MOVEMENT OF GOODS AND SERVICES THROUGH THE DESIGN OF ARTERIAL ROUTES, HIGHWAY ACCESS AND ADJACENT LAND USES IN WAYS THAT FACILITATE THE EFFICIENT MOVEMENT OF GOODS AND SERVICES AND THE SAFE ROUTING OF HAZARDOUS MATERIALS CONSISTENT WITH FEDERAL AND STATE GUIDELINES.

8.1.7 IMPLEMENT THE TRANSPORTATION SYSTEM PLAN (TSP) IN A COORDINATED MANNER BY COORDINATING AND COOPERATING WITH ADJACENT AGENCIES (INCLUDING WASHINGTON COUNTY, BEOAVERTON, TUALATIN, LAKE OSWEGO, CITY OF PORTLAND, TRI-MET, METRO AND ODOT) WHEN NECESSARY TO DEVELOP TRANSPORTATION PROJECTS WHICH BENEFIT THE REGION AS A WHOLE IN ADDITION TO THE CITY OF TIGARD.
IMPLEMENTATION STRATEGIES

1. Design streets and highways to respect the characteristics of the surrounding land uses, natural features, and other community amenities.

2. Develop and maintain a pedestrian plan in Tigard, outlining pedestrian routes. Develop sidewalk standards to define various widths, as necessary, for City street types.

3. Develop and maintain a program of street design standards and criteria for neighborhood traffic management (NTM) for use in new development and existing neighborhoods. Measures to be developed may include (but are not limited to) narrower streets, speed humps, traffic circles, curb/sidewalk extensions, curving streets, diverters and/or other measures, as developed as part of a City NTM plan.

4. Develop and maintain a series of system maps and design standards for motor vehicles, bicycle, pedestrian, transit and truck facilities in Tigard.

5. The Regional Transportation Plan (RTP) and Tri-Met service plans will be the guiding documents for development of Tigard’s transit plan. The City should provide input to Tri-Met regarding their specific needs as they annually review their system. This input should focus on improving service (coverage and frequency) to under-served areas. New transit service should be considered concurrent to street improvements when significant street extensions are completed. The City should encourage land intensive uses to locate near transitways and require high intensity uses (i.e. large employment, commercial sites) to provide transit facilities. When bus stops reach 75 boardings per day, bus shelters should be considered in development review. Sidewalks should be available within ¼ mile from all transit routes and transit should be provided to schools and parks.

6. Develop a bicycle plan which connects key activity centers (such as schools, parks, public facilities and retail areas) with adjacent access. Standards for bicycle facilities within Tigard will be developed and maintained. Where activity centers are on local streets, connections to bicycle lanes shall be designated.

7. Develop a pedestrian plan which connects key activity centers with adjacent access. Require sidewalks to be constructed on all streets within within Tigard.

8. Standards for pedestrian facilities within Tigard will be developed and maintained.

9. The bicycle and pedestrian plans will need to indicate linkages between recreational and basic pedestrian networks. A primary facility in Tigard should link together Fanno Creek, Tualatin River and the BPA right-of-way in the west of Tigard. Design standards for recreational elements will need to be developed and maintained.

10. Revise the Code to require new streets built to provide connectivity to incorporate traffic management design elements, particularly those which inhibit speeding. As a planning standard, require local streets to have connections every 530 feet in planning local and neighborhood streets. The purpose of this policy is to provide accessibility within Tigard, with a focus on pedestrian connectivity. Pedestrian connectivity can be provided via pedestrian/bike paths between cul-de-sacs and/or greenways where auto connectivity does not exist or is not feasible.

11. Support development of a commuter rail system connecting the south Metro area to the Beaverton/Hillsboro area, with stop(s) in Tigard.

12. A functional classification system shall be developed for Tigard which meets the City’s needs and respects needs of other agencies (Washington County, Metro, ODOT). Appropriate design standards for these roadways will be developed by the appropriate jurisdiction.

13. Place a high priority on routine street maintenance to preserve its infrastructure investment and improve safety.

14. Undertake a process of defining school routes for pedestrians by working with the School District, citizens and developers.
15. Develop guidelines to provide access control standards and apply these standards to all new road construction and new development. For roadway reconstruction, existing driveways shall be compared with the standards and a reasonable attempt shall be made to comply (consolidating driveway accesses or relocating driveways to a lower classification street are examples).

16. Develop a process to review traffic accident information regularly to systematically identify, prioritize and remedy safety problems. Working with the County, develop a list of high collision sites and projects necessary to eliminate such problems. Require development applications to identify and mitigate for high collision locations if they generate 10% increase to existing traffic on an approach to a high collision intersection. Washington County’s SPIS (Safety Priority Indexing System) could be used as a basis for determining high collision locations.

17. Include paths to schools, parks, and town center areas as priority roadway lighting locations.

18. Require development to provide right-of-way (if needed) and safe access as determined by application of the City’s development code and standards for design. Require that the minimum City standards be met for half-street adjacent to developing property for a development to proceed (with consideration of rough proportionality). Apply this policy to both pedestrians and motor vehicles.

19. Monitor Metro and Washington County’s current work to develop a level of service standard. Level of service E (and demand-to-capacity ratio of 1.0 or less), Highway Capacity Manual, Chapters 15, 16, and 17 (or subsequent updated references) is recommended to balance provision of roadway capacity with level of service and funding. ODOT, Metro and Washington County performance standards should be considered on state or County facilities and for 2040 Concept Areas (as defined in Table 1.2 of the RTP). The City will work to make the arterial & collector street systems operate effectively to discourage “cut-through” traffic on neighborhood and local streets.

20. Work toward the eventual connection of streets identified on the Transportation plan map as development occurs, as funds are available and opportunities arise.

21. As outlined in Title 6 of the Metro Urban Growth Management Functional Plan, develop access connection standards. The arterial street system should facilitate street and pedestrian connectivity.

22. Work with federal agencies, the Public Utility Commission, the Oregon Department of Energy and ODOT to assure consistent laws and regulations for the transport of hazardous materials.

23. Maintain plan and policy conformance to the Regional Transportation Plan and Transportation Planning Rule (OAR 660-012). Seek compatibility with all adjacent county and city jurisdiction plans.

8.2 TRAFFICWAYS

Findings

- A need exists to place all of the existing public local and collector streets in the Tigard City Limits under the City’s jurisdiction.

- According to a Washington County computer study 48-60% of Tigard residents work outside of the Washington County area.

- Between 77-83% of Tigard residents commute to work by auto as single occupants.

- Major congestion problems within the City have resulted from the rapid population growth since 1970, creating a need for major street improvements.

- A corridor study for Pacific Highway (99W) has not been prepared by Metro. It is the only major trafficway within the region which has not been studied. Pacific Highway, the major trafficway through the City, has the highest traffic volumes, congestion and accident[s] rates within the City. There is a need to prepare a corridor study for Pacific Highway. The City, Metropolitan Service District and [the] State should coordinate such a study.

- Many of the streets in Tigard are dead-ended which adds to the congestion on existing completed streets. Therefore, a number of street connections need to be constructed.
• A major concern of the community regarding transportation is the need to maintain and improve the livability of residential areas in the face of increasing population and transportation requirements.

• The City needs to develop a strategy to coordinate public street improvements with private sector improvements to achieve the most effective use of the limited dollars available for road development and improvement.

• Major residential growth during the planning period is expected to occur in the westerly and southerly areas of Tigard. Both of these areas lack adequate improved trafficways.

• A need exists during the planning period to complete a collector street system between Scholls Ferry Road, Walnut Street, Gaarde Street, Bull Mountain Road and Pacific Highway. The location of these connections needs to be coordinated between the City, County, State and [the] Metropolitan Service District.

• A need exists to complete the collector street system within the Tigard Triangle area to make more of this area accessible to developers, employers and employees.

POLICIES

8.2.1  THE CITY SHALL PLAN FOR A SAFE AND EFFICIENT STREET AND ROADWAY SYSTEM THAT MEETS CURRENT NEEDS AND ANTICIPATED FUTURE GROWTH AND DEVELOPMENT.

8.2.2  THE CITY SHALL PROVIDE FOR EFFICIENT MANAGEMENT OF THE TRANSPORTATION PLANNING PROCESS WITHIN THE CITY AND THE METROPOLITAN AREA THROUGH COOPERATION WITH OTHER FEDERAL, STATE, REGIONAL AND LOCAL JURISDICTIONS.

8.2.3  THE CITY SHALL REQUIRE AS A PRECONDITION TO DEVELOPMENT APPROVAL THAT:

a. DEVELOPMENT ABUT A PUBLICLY DEDICATED STREET OR HAVE ADEQUATE ACCESS APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY;

b. STREET RIGHT-OF-WAY BE DEDICATED WHERE THE STREET IS SUBSTANDARD IN WIDTH;

c. THE DEVELOPER COMMIT TO THE CONSTRUCTION OF THE STREETS, CURBS AND SIDEWALKS TO CITY STANDARDS WITHIN THE DEVELOPMENT;

d. INDIVIDUAL DEVELOPERS PARTICIPATE IN THE IMPROVEMENT OF EXISTING STREETS, CURBS AND SIDEWALKS TO THE EXTENT OF THE DEVELOPMENT'S IMPACTS;

e. STREET IMPROVEMENTS BE MADE AND STREET SIGNS OR SIGNALS BE PROVIDED WHEN THE DEVELOPMENT IS FOUND TO CREATE OR INTENSIFY A TRAFFIC HAZARD;

f. TRANSIT STOPS, BUS TURNOUT LANES AND SHELTERS BE PROVIDED WHEN THE PROPOSED USE OF A TYPE WHICH GENERATES TRANSIT RIDERSHIP;

g. PARKING SPACES BE SET ASIDE AND MARKED FOR CARS OPERATED BY DISABLED PERSONS AND THAT THE SPACES BE LOCATED AS CLOSE AS POSSIBLE TO THE ENTRANCE DESIGNED FOR DISABLED PERSONS; AND

h. LAND BE DEDICATED TO IMPLEMENT THE BICYCLE/PEDESTRIAN CORRIDOR IN ACCORDANCE WITH THE ADOPTED PLAN.

8.2.4  A CHANGE IN ROADWAY CLASSIFICATION, OR LOCATION SHALL REQUIRE AN AMENDMENT TO THE COMPREHENSIVE PLAN TRANSPORTATION MAP, , THE MAP WILL BE AMENDED BY DESIGNATING THE LOCATION OF THE ROADWAY AND DESIGNATING ITS CLASSIFICATION.
8.2.5 THE CITY SHALL SUPPORT THE GOALS AND OBJECTIVES OF THE OREGON DEPARTMENT OF TRANSPORTATION TO IMPROVE TRAFFIC FLOW AND CAPACITY AT THE INTERCHANGE OF I-5 AND HIGHWAY 217/KRUSE WAY. HOWEVER, THE CITY RETAINS THE PREROGATIVE TO REVIEW, COMMENT AND CONCUR WITH THE ACTUAL ALIGNMENTS OF THE PROJECT.

8.2.6 THE CITY SHALL ADOPT THE FOLLOWING TRANSPORTATION IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE PLANNED LAND USES IN THE TIGARD TRIANGLE:

a. Highway 99W should be widened to 6 lanes throughout the study area (tool box). This improvement should be constructed in the short term. In the event that widening Highway 99 to six lanes is prohibitive due to physical constraints, the Dartmouth extension could potentially provide needed northeast-to-southwest travel demand.

b. 72nd Avenue should be widened to four lanes with left turn lanes at major intersections and the Hunziker/Hampton overcrossing should be constructed. These two improvements will provide additional roadway capacity for circulation within the Triangle and for access to and from the triangle via 72nd Avenue. Construction of the Hunziker/Hampton overcrossing would have the additional advantages of eliminating geometric deficiencies at the Highway 217/72nd Avenue interchange; thereby providing further additional capacity at this interchange. For the buildout scenario (2015), these improvements will provide adequate capacity in the vicinity of the Highway 217/72nd Avenue interchange.

c. The Hampton/Hunziker connection is only justified based on its operational relief to the 72nd interchange. Further study should be conducted to examine alternative measures to relieve this situation in a more cost effective way. Further study may indicate that extending Hampton further southwesterly (to connect with Hall Boulevard in the vicinity of McDonald Street) may better accommodate projected travel demand. Short of constructing this structure, a direct ramp instead of a loop ramp from southbound 72nd Avenue to northbound Highway 217 would provide additional capacity in the vicinity of the Highway 217/72nd Avenue interchange.

d. Access from Dartmouth to northbound Highway 217 is critical to Tigard Triangle traffic circulation, therefore, it should be studied as part of the Highway 217 corridor analysis to be performed by ODOT and Metro. Under existing conditions, there is significant roadway congestion near the Highway 99W/Highway 217 interchange. Construction of the Dartmouth Extension and access to northbound Highway 217 would mitigate congestion at this interchange because motorists in this area of the Tigard Triangle would have the option to access northbound Highway 217 from Dartmouth or Highway 99W.

e. Analysis indicates that there is a long term (20-30 years) need for Dartmouth Road to continue over Highway 217 and potentially south to Hall Boulevard as well as for extending the collector-distributor roads from the Highway 217/72nd Avenue interchange through the Highway 217/Highway 99W interchange. The Highway 217 corridor analysis to be performed by Metro and ODOT should consider the advantages and disadvantages of these improvements. The Dartmouth extension to Hall Boulevard should be constructed only if further system improvements to Hall Boulevard are made concurrently. If additional capacity is not added to Hall Boulevard south of where the Dartmouth extension would be connected, the effectiveness of this connection would be diminished. Alternatively, another roadway could be constructed that provides a connection from the Dartmouth extension to Hall Boulevard in the vicinity of McDonald Street.

f. Adopt the functional classification plan for streets internal to the Tigard Triangle as shown on Figure 1. The following policies apply to local streets within the Tigard Triangle:

1. Local street spacing shall be a maximum of 660 feet.

2. Access way spacing shall be a maximum of 330 feet.

3. Spacing of signalized intersections on Major Arterials shall be a minimum of 600 feet.

4. Existing rights of way will, to the greatest extent possible, be utilized for a local street system. Right of way vacations will be considered only when all other policies in this subsection are met.
8.2.7 THE CITY SHALL ADOPT THE FOLLOWING PEDESTRIAN, BICYCLE AND PUBLIC TRANSIT IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE EXISTING AND PLANNED LAND USES IN THE WASHINGTON SQUARE REGIONAL CENTER:

a. Commuter Rail Service and Station: Washington County has proposed commuter rail services from Wilsonville to Beaverton on the existing freight line to the west of Highway 217. The City supports a commuter rail station in the vicinity of the North: Mall to Nimbus Overcrossing.

b. Pedestrian Improvements – SW Greenburg Road: Construct pedestrian improvements on SW Greenburg Road between SW Hall Boulevard and Highway 217 to improve pedestrian crossing opportunities and safety.

c. Pedestrian Improvements- SW Hall Boulevard: Construct pedestrian crossing refuge (median) on SW Hall Boulevard between SW Pfaffle Street and SW Locust Street to improve pedestrian crossing opportunities and safety.

d. Pedestrian And Bicycle Improvements- SW Locust Street: Realign SW 90th Avenue across SW Locust Street to provide a four-legged intersection at Locust Street. Construct curb extensions, sidewalks and bicycle lanes to provide improved non-auto accessibility across and along Locust Street.

e. Pedestrian Access Improvements- Washington Square Mall: Construct pedestrian improvements (e.g. sidewalks, landscaping, and connections from parking to the mall and surrounding arterials) in the Washington Square Mall area.

f. Identify potential bicycle network alignments with connections to existing bikeways, neighborhoods and activity centers, with particular emphasis on extending the Fanno Creek Bikeway along Ash Creek.

g. Construct a pedestrian trail within and/or around the Red Tail Public Golf Course. This presents an opportunity to provide a safe neighborhood walking/exercise area and to serve more of the population using existing resources.

h. Provide pedestrian/bicycle connections on local streets to, from and within new developments and redevelopments.

i. Identify potential bicycle network alignments with connections to existing bikeways, neighborhoods and activity centers, with particular emphasis on extending the Fanno Creek Bikeway along Ash Creek.

j. Shuttle/People Mover: Develop local area transit service operating between the Washington Square Mall area, the Nimbus/Cascade districts and Lincoln Center. The service could use the proposed connections across Highway 217. Initially a shuttle bus, in the future this service could be converted to some type of fixed route system.

k. Transit Center Improvements: Construct capacity and facility improvements (e.g. real time transfer information, lighting, covered connections to the Mall, and additional bus bays) to the existing transit center at the Washington Square Mall.

l. Transit System Improvements: The City supports transit routing and frequency improvements in the Regional Center. Tri-Met has provided an outline of potential service improvements and planning that would need to occur to implement these improvements. The range of improvements include relocating the Transit Center to provide better connections into the Mall, coordinating park and ride facilities with the future commuter rail service, providing bus stop improvements in the Regional Center area, and decreasing transit service headways. Tigard, Tri-Met and employers or developers in the district should begin to develop a transit improvement plan for the district.

m. Travel Demand Management Program: The City recognizes the importance of developing
a travel demand management program for the Regional Center area. A key feature of this program will be a Transportation Management Association (TMA) that coordinates the means of decreasing demand for single occupant vehicles within the Regional Center area, parking management strategies, transit system improvements, and travel demand management programs. The City of Tigard, Beaverton, Washington County, Tri-Met, Metro, ODOT and employers in the area should begin to work together to refine this framework into a detailed plan for the area. (Rev. Ord. 02-12)

8.2.8 THE CITY SHALL ADOPT THE FOLLOWING AUTO AND ROADWAY IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE EXISTING AND PLANNED LAND USES IN THE WASHINGTON SQUARE REGIONAL CENTER:

a. Near Term Traffic Operations Improvements: Small-scale roadway operations improvement projects shall be implemented in the near future. These improvements correct existing system deficiencies or provide needed pedestrian, bicycle or transit facilities:

1. Develop signal timing improvements on Greenburg Road between Highway 217 and the Washington Square Mall.

2. Construct a separate eastbound right turn lane from Hall Boulevard to Scholls Ferry Road. This could require Hall Boulevard overcrossing improvements.

3. Construct pedestrian improvements throughout the district.

4. Develop a shuttle system connecting Lincoln Center, Washington Square Mall and Nimbus Business Park.

5. Evaluate and confirm that the southbound Hall Boulevard right turn only lane into the Washington Square Mall at Palmblad Lane should be eliminated. Restripe as appropriate.

6. Develop signal timing improvements on Hall Boulevard that include capabilities to allow buses that have fallen behind schedule to travel to the front of the queue and travel through the signal prior to other traffic (“queue jumping capabilities”).

7. Develop direct access from the Washington Square Mall to the Target Store so that motorists do not have to travel on Hall Boulevard when traveling between the two facilities.

8. In cooperation with the City of Beaverton and Tri-Met, identify a new Park & Ride site to replace the existing site that was intended to be temporary.


c. North: Mall to Nimbus Connection: Construct a bridge over Highway 217 connecting the Washington Square Mall with the Nimbus Business Center. The bridge would include a two-lane roadway, bike lanes, sidewalks and facilities for transit. The bridge is intended to be a facility for local travel within the Regional Center.

d. SW Nimbus Avenue: There are two components of the SW Nimbus Avenue Improvements:

1. North of Scholls Ferry Road: Modify the existing roadway (north of Scholls Ferry Road) to a 3-lane facility with parking, bike lanes and sidewalks. Potential for streetscape improvements including solid median with specific turn slots to individual properties.

2. Nimbus to Greenburg Connection: Extend SW Nimbus Avenue to meet Greenburg Road. This would be a 5-lane roadway with bike lanes and sidewalks, but no on-street parking.
e. SW Lincoln Street: Modify Lincoln Street to provide a 3-lane section with parking, bike lanes and sidewalks between SW Locust Street and SW Oak Street.

f. SW Hall Boulevard: The Washington Square Regional Center Task Force identified this project as the fifth priority for implementation in the Regional Center area. The project would first be constructed to 3-lane standards with sidewalks and bike lanes at five lane limits between Oleson Road and Highway 217. If after other project recommendations have been constructed, it is found that Hall Boulevard still needs to be a five-lane facility the roadway would then be widened again. In the interim, and as possible the City of Tigard or ODOT would acquire the right of way necessary for a five-lane section

As a three or five-lane facility, this project includes landscaped median with designated left turn pockets that also provide for improved pedestrian crossing opportunities. This is consistent with Metro the Regional Boulevard Designation for Hall Boulevard.

g. SW Cascade Avenue: Improve the existing roadway (north and south of Scholls Ferry Road) to 3-lane standard with parking, bike lanes and sidewalks. Potential for streetscape improvements including solid median with specific turn slots to individual properties.

h. SW Locust Street: Modify Locust Street between Hall Boulevard and Greenburg Road to include a three-lane section with parking, bike lanes, sidewalks and other streetscape improvements to maintain as a lower speed street.

i. SW Oak Street: Modify the roadway to provide 2-lane section with parking, bike lanes and sidewalk between SW Hall Boulevard and SW Lincoln Street.

j. Washington Square Internal Roads: Construct improvements to existing Washington Square Mall internal circulation roads to public street standards with bike lanes and sidewalks.

k. Adopt the functional classification plan for streets internal to the Washington Square Regional Center as shown on Figure 1. The following policies apply to local streets within the regional center:

1. Local street spacing shall be a maximum of 530 feet.
2. Access way spacing shall be a maximum of 330 feet.
3. Spacing of signalized intersections on Major Arterials shall be a minimum of 600 feet.
4. Existing rights of way will, to the greatest extent possible, be utilized for a local street system. Right of way vacations will be considered only when all other policies in this subsection are met.

l. The transportation projects described in this section should be added to the City of Tigard's Transportation System Plan. The City, ODOT and Metro should work to include these improvements in regional and state implementation programs.

(Rev. Ord. 02-12)

IMPLEMENTATION STRATEGIES

1. The City shall develop, adopt and implement a master street plan that anticipates all needed trafficway improvements so as to plan for the necessary available resources to develop these streets when they are needed.

2. The City shall develop, maintain and implement a capital improvements program which:

   a. Is consistent with the land use policies of the Comprehensive Plan;

   b. Encourages a safe, convenient and economical transportation system;
c. Furthers the policies and implementation strategies of the City's Comprehensive Plan;
d. Considers a variety of transit modes within the rights-of-way;
e. Meets local needs for improved transportation services;
f. Pursues and establishes other funding sources from the federal, state, regional and/or local agencies; and
g. Designates the timing of such projects to ensure their installation when those facilities are needed.

3. The City shall specify street design standards within the Tigard Community Development Code.

4. The City shall maintain the carrying capacity of arterials and collectors by reducing curb cuts and other means of direct access, and requiring adequate right-of-way and setback lines as part of the development process. The Community Development Code shall state the access requirements for each street classification.

5. The City's Tigard Community Development Code shall require developers of land to dedicate necessary rights-of-way and install necessary street improvements to the City's standards when such improvements have not been done prior to the developer's proposals. These necessary dedications may be required upon approval of any development proposal.

6. The City shall control and limit the number of access points and will signalize trafficways in a manner that provides for a consistent flow of traffic and therefore minimizes or reduces vehicular emissions.

7. The City shall include provisions in the Tigard Community Development Code which addresses the aesthetic quality of the transportation system to ensure community livability and to minimize the effects on abutting properties. This can be accomplished through:
   a. Building setback requirements;
   b. Requirements for landscaping and screening and through other site design criteria for visual enhancement;
   c. Limiting residential land uses along major arterial trafficways; and
   d. Sign controls.

8. The City shall coordinate their planning efforts with adjacent cities and other agencies e.g., Beaverton, Portland and Tualatin, Washington County, METRO, Tri-Met and ODOT.

9. The City shall work out reciprocal agreements with other agencies for exchanging information pertinent to local transportation planning.

8.3 PUBLIC TRANSPORTATION

Findings

• Since the oil embargos of the 1970s, the cost of motor fuels has increased fourfold.

• The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) is responsible for providing public transportation to the residents of Multnomah, Washington and Clackamas Counties.

• Presently, there are Eleven (11) bus lines that service the Tigard area.

• Public transit offers the community an opportunity to reduce traffic and pollution as well as increase energy efficiency.

• Work trips and shopping trips are most conducive to mass transportation.

• The proposed downtown Tri-Met Tigard transfer center will increase service and lessen travel time for riders.
8.3.1  THE CITY SHALL COORDINATE WITH TRI-MET TO PROVIDE FOR A PUBLIC TRANSIT SYSTEM WITHIN THE PLANNING AREA WHICH:

a. MEETS THE NEEDS OF BOTH THE CURRENT AND PROJECTED, FOR THE TIGARD COMMUNITY;

b. ADDRESSES THE SPECIAL NEEDS OF A TRANSIT DEPENDENT POPULATION;

c. REDUCES POLLUTION AND TRAFFIC; AND

d. REDUCES ENERGY CONSUMPTION.

8.3.2  THE CITY SHALL ENCOURAGE THE EXPANSION AND USE OF PUBLIC TRANSIT BY:

a. LOCATING LAND INTENSIVE USES IN CLOSE PROXIMITY TO TRANSITWAYS;

b. INCORPORATING PROVISIONS INTO THE COMMUNITY DEVELOPMENT CODE WHICH REQUIRE DEVELOPMENT PROPOSALS TO PROVIDE TRANSIT FACILITIES; AND

c. SUPPORTING EFFORTS BY TRI-MET AND OTHER GROUPS TO PROVIDE FOR THE NEEDS OF THE TRANSPORTATION DISADVANTAGED.

IMPLEMENTATION STRATEGIES

1. The City shall request Tri-Met to extend service to areas within the City that do not currently have service.

2. In the City's Community Development Code, the City shall require large developments to provide transit facilities e.g., pull-offs and shelters, if such developments are located adjacent to transit routes.

3. The City shall propose land use densities, within the Comprehensive Plan, along transit oriented corridors that support public transportation service.

4. The City shall work with Tri-Met and other transit providers to encourage transit service for the transit dependent population e.g., the poor and handicapped.

5. The City shall encourage its citizens to use mass transit systems, where possible, to make greater effectiveness of the transit system while reducing automobile usage.

6. The City shall coordinate with the transit providers to encourage carpooling and investigate if there is a local need for carpooling in the Tigard area.

8.4  TRANSPORTATION FOR THE DISADVANTAGED

Findings

• Tri-Met is responsible for providing handicapped transit accessibility including coordination of special transit services by social service agencies.

• Tri-Met conducts the detailed special handicapped transit planning necessary to identify required service improvements and adopt a plan for meeting federal requirements for handicapped accessibility.

POLICY

8.4.1  THE CITY SHALL COORDINATE WITH WASHINGTON COUNTY, TRI-MET AND OTHER REGIONAL AND STATE AGENCIES IN THE IDENTIFICATION AND ACCOMMODATION OF INDIVIDUALS WITH SPECIAL TRANSPORTATION NEEDS.
1. The City shall require, through the implementation process, that parking spaces be set aside and marked for disabled persons [parking] and that such spaces be located in convenient locations.

2. The City shall continue to coordinate with [the] appropriate agencies in the identification and accommodation of those individuals with special transportation needs.

8.5 PEDESTRIAN AND BICYCLE PATHWAYS

Findings

• As the City of Tigard continues to grow, more people may rely on the bicycle and pedestrian pathways for utilitarian as well as for recreational purposes.

• In 1974, the City Council adopted a Comprehensive Pedestrian/Bicycle Pathway Plan.

• The City has required adjacent development to install that portion of the bicycle/pedestrian pathways shown on the adopted plan which abuts the development.

• The City has implemented portions of the adopted plan through the City’s overlay program.

• The adopted Bicycle/Pedestrian Plan provides for a dual function pathway system; bicycles and pedestrians use the same system.

POLICY

8.5.1 THE CITY SHALL LOCATE BICYCLE/PEDESTRIAN CORRIDORS IN A MANNER WHICH PROVIDES FOR PEDESTRIAN AND BICYCLE USERS, SAFE AND CONVENIENT MOVEMENT IN ALL PARTS OF THE CITY, BY DEVELOPING THE PATHWAY SYSTEM SHOWN ON THE ADOPTED PEDESTRIAN/BIKEWAY PLAN.

IMPLEMENTATION STRATEGIES

1. The City shall review each development request adjacent to areas proposed for pedestrian/bike pathways to ensure that the adopted plan is properly implemented, and require the necessary easement or dedications for the pedestrian/bicycle pathways.

2. The City shall review and update the adopted Pedestrian/Bikeway Plan on a regular basis to ensure all developing areas have accessibility to the Pedestrian/Bikeway system.

3. The City shall coordinate with Washington County to connect the City's Pedestrian/Bike Pathway system to the County's system.

4. City codes shall include provisions which prohibit motor driven vehicles on designated and maintained pedestrian/bicycle pathways.

8.6 RAILROADS

Findings

• Tigard is serviced by Southern Pacific and Burlington Northern railroad lines which carry strictly freight through the City Limits.

• Within the downtown area each railroad company has its own trackage and the usage of those lines is based on the railroads' needs.

• There should only be one set of railroad tracks traversing the downtown area. The City is in the process of discussing this issue with both railroads.
• Many of the commercial and industrial businesses within Tigard rely on the railroads for the shipping and receiving of goods.

• The City is currently coordinating the upgrading of all the railroad crossings within Tigard with the railroads.

POLICY

8.6.1 THE CITY SHALL COOPERATE WITH THE RAILROADS IN FACILITATING RAIL FREIGHT SERVICE TO THOSE COMMERCIAL AND INDUSTRIAL BUSINESSES WITHIN THE CITY THAT DEPEND ON RAILROAD SERVICE.

IMPLEMENTATING STRATEGIES

1. The City shall continue to coordinate with the Southern Pacific and Burlington Northern railroads to provide adequate railroad service.

2. The City shall designate adequate commercial and industrial land within close proximity to existing railroad service lines to ease railroad accessibility to those businesses that rely on the service.

3. The City shall coordinate with the railroads to combine the trackage within the downtown area.

(Rev. Ord. 02-03)
9. ENERGY

Replaced by CPA2007-00001 and Ordinance 07-22
10. URBANIZATION

This chapter addresses the concerns expressed by Statewide Planning Goal # 14:

Urbanization, which is "to provide for an orderly and efficient transition from rural to urban land use."

The Urbanization goal is important because it develops a framework within which all development activities have to be coordinated, and it integrates and balances all of the other available land resources in terms of the needs expressed by other goals; namely Housing, Economy, Public Facilities and Services, Natural Features and Open Space, and Transportation.

The urbanization goal also requires an allocation of land for accommodation of urban expansion during the planning period (1980 - 2000), and development of plans to arrange the orderly and efficient transition from urbanizable land to urban land.

The findings, policies and implementation strategies address a variety of topics related to urbanization. Policies describe the process which satisfies the need for efficient, orderly and logical urbanization within the geographical limits of Tigard's Urban Planning Area.

Additional information on this topic is available in the "Comprehensive Plan Report: Urbanization."

Findings

• The City of Tigard grew from 5,302 people in 1970 to 14,286 people in 1980 (Census 1970 & 1980) and the City predicts that Tigard will continue to grow to more than double its current size by the year 2000. The current 1983 population is 18,379. A portion of this increase is due to annexations.

• The City limits have expanded by approximately 4.4 square miles since 1970, to its present size of approximately 8.6 square miles.

• All lands within the Tigard Urban Planning Area as well as the City Limits have been designated for urban land uses, and are wholly within the Portland Metropolitan Area Urban Growth Boundary.

• The Tigard Comprehensive Plan is an active plan, meaning the City plans and designates land uses within the Tigard Urban Planning Area (T.U.P.A.). Washington County retains legal jurisdiction over development proposals, zoning and public improvement projects outside the City limits but within the T.U.P.A. Tigard does have right of review and comment on proposals and projects within the T.U.P.A.

• The area within the Tigard Urban Planning Area, but outside the current City Limits, that is not already developed to urban intensities will be made available for urban uses via an Urban Planning Area Agreement between the City of Tigard and Washington County, annexation to the City and subsequent development proposals by the property owners.

• The City is committed to providing urban level services, or the coordination of providing these services with the appropriate service districts, to all areas within the city limits boundaries.

• The intent of the City is to provide for an orderly and efficient land use pattern and urban services which must be available at the time of development.

• The timing, location and expansion of [the] transportation systems are important factors affecting future urbanization.

• The desired development and growth pattern for the Tigard Urban Planning Area is to be defined by a growth management system, e.g., extension of services, streets and land use which will guide the timing, type and location of growth.

• To assist in the financing of street facilities and improvements, Tigard has imposed a Systems Development Charge (SDC) on new housing development.

• Major trunk line sewer service in the Tigard Urban Planning Area is provided by the Unified Sewerage Agency (USA) of Washington County which has assumed this responsibility for the City's as well as that of eastern Washington County; major sewage system since 1970.
• Water in the Tigard area is provided by the Metzger and Tigard Water Districts. These districts purchase their water from Portland, Lake Oswego and other sources.

• An Urban Planning Area Agreement (UPAA) between Tigard and Washington County regarding land use planning and annexation was adopted in 1983. The intent of this agreement is to:
  a. Identify the urbanizable land within each jurisdiction surrounding Tigard;
  b. Provide for orderly and efficient transition from urbanizable land to urban land;
  c. Provide a process for reviewing the land use designations between the City and County;
  d. Provide for a process to extend existing services; and
  e. Provide a process for annexations of land to the City.

• The agreement requires that the parties resolve various issues, otherwise the agreement will lapse on January 1, 1984 (or a later date if the parties extend the agreement) and the 1980 agreement between the parties is revived.

• The City does not have an UPAA with the school districts (Tigard and Beaverton), but the districts do work with the City’s Planning and Development Department to estimate the enrollment impact of new residential development in the City.

• The City has made a significant effort in the past to manage the location and type of growth, and to coordinate this growth with the extension of services and expansion of facilities.

• The City is currently in the process of including all of the “unincorporated islands” within the city limits.

10.1 ANNEXATION OF LAND

POLICIES

10.1.1 PRIOR TO THE ANNEXATION OF LAND TO THE CITY OF TIGARD:

a. THE CITY SHALL REVIEW EACH OF THE FOLLOWING SERVICES AS TO ADEQUATE CAPACITY, OR SUCH SERVICES TO BE MADE AVAILABLE, TO SERVE THE PARCEL IF DEVELOPED TO THE MOST INTENSE USE ALLOWED*, AND WILL NOT SIGNIFICANTLY REDUCE THE LEVEL OF SERVICES AVAILABLE TO DEVELOPED AND UNDEVELOPED LAND WITHIN THE CITY OF TIGARD. THE SERVICES ARE:

1. WATER;
2. SEWER;
3. DRAINAGE;
4. STREETS;
5. POLICE; AND
6. FIRE PROTECTION.

* Most intense use allowed by the conditions of approval, the zone or the Comprehensive Plan.

b. IF REQUIRED BY AN ADOPTED CAPITAL IMPROVEMENTS PROGRAM ORDINANCE, THE APPLICANT SHALL SIGN AND RECORD WITH WASHINGTON COUNTY A NONREMONSTRANCE AGREEMENT REGARDING THE FOLLOWING:

1. THE FORMATION OF A LOCAL IMPROVEMENT DISTRICT (L.I.D.) FOR ANY OF THE FOLLOWING SERVICES THAT COULD BE PROVIDED THROUGH SUCH A DISTRICT: THE EXTENSION OR IMPROVEMENT OF THE FOLLOWING:

   a) WATER;

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b) SEWER;

c) DRAINAGE; AND

d) STREETS.

2. THE FORMATION OF A SPECIAL DISTRICT FOR ANY OF THE ABOVE SERVICES OR THE INCLUSION OF THE PROPERTY INTO A SPECIAL SERVICE DISTRICT FOR ANY OF THE ABOVE SERVICES.

c. THE CITY SHALL PROVIDE URBAN SERVICES TO AREAS WITHIN THE TIGARD URBAN PLANNING AREA OR WITH THE URBAN GROWTH BOUNDARY UPON ANNEXATION.

10.1.2 APPROVAL OF PROPOSED ANNEXATIONS OF LAND BY THE CITY SHALL BE BASED ON FINDINGS WITH RESPECT TO THE FOLLOWING:

a. THE ANNEXATION ELIMINATES AN EXISTING "POCKET" OR "ISLAND" OF UNINCORPORATED TERRITORY; OR

b. THE ANNEXATION WILL NOT CREATE AN IRREGULAR BOUNDARY THAT MAKES IT DIFFICULT FOR THE POLICE IN AN EMERGENCY SITUATION TO DETERMINE WHETHER THE PARCEL IS WITHIN OR OUTSIDE THE CITY;

c. THE POLICE DEPARTMENT HAS COMMENTED UPON THE ANNEXATION;

d. THE LAND IS LOCATED WITHIN THE TIGARD URBAN PLANNING AREA AND IS CONTIGUOUS TO THE CITY BOUNDARY;

e. THE ANNEXATION CAN BE ACCOMMODATED BY THE SERVICES LISTED IN 10.1.1(a).

10.1.3 UPON ANNEXATION OF LAND INTO THE CITY WHICH CARRIES A WASHINGTON COUNTY ZONING DESIGNATION, THE CITY OF TIGARD SHALL ASSIGN THE CITY OF TIGARD ZONING DISTRICT DESIGNATION WHICH MOST CLOSELY CONFORMS TO THE COUNTY ZONING DESIGNATION.

(Rev. Ord. 84-21)

10.2 EXTENSION OF SERVICES OUTSIDE THE CITY LIMITS

POLICIES

10.2.1 THE CITY SHALL NOT APPROVE THE EXTENSION OF CITY SERVICES EXCEPT:

a. WHERE APPLICATIONS FOR ANNEXATION FOR THOSE PROPERTIES HAVE BEEN APPROVED BY THE CITY; OR

b. IN CIRCUMSTANCES WHERE APPLICABLE STATE AND COUNTY HEALTH AGENCIES HAVE DECLARED A POTENTIAL OR IMMINENT HEALTH HAZARD PURSUANT TO ORS FOR 431.705 TO 431.760 (HEALTH HAZARD ANNEXATION OR DISTRICT FORMATION).

(Rev. Ord. 07-19)

10.2.2 IN ADDITION TO THE REQUIREMENTS OF POLICY 10.2.1, THE EXTENSION OF SEWER LINES OUTSIDE OF THE CITY LIMITS SHALL NOT REDUCE THE CAPACITY BELOW THE REQUIRED LEVEL FOR AREAS WITHIN THE CITY.
10.2.3 AS A PRECONDITION TO THE APPROVAL OF THE EXTENSION OF SERVICES OUTSIDE THE CITY LIMITS, THE CITY SHALL HAVE THE RIGHT OF REVIEW FOR ALL DEVELOPMENT PROPOSALS OUTSIDE THE TIGARD CITY LIMITS BUT WITHIN THE TIGARD URBAN PLANNING AREA (REFERENCE TIGARD'S URBAN PLANNING AREA AGREEMENTS WITH WASHINGTON COUNTY). THE CITY SHALL REQUIRE THAT DEVELOPMENT WILL NOT:

a. PRECLUDE THE FURTHER DEVELOPMENT OF THE PROPERTIES TO URBAN DENSITIES AND STANDARDS; OR
b. PRECLUDE THE SUBSEQUENT DEVELOPMENT OF SURROUNDING PROPERTIES.

THIS REVIEW SHALL INCLUDE THE FOLLOWING FACTORS AS SET FORTH IN THE TIGARD COMPREHENSIVE PLAN AND APPROPRIATE IMPLEMENTATING ORDINANCES:

a. LAND USE;
b. DENSITY;
c. PLACEMENT OF STRUCTURES ON THE SITE;
d. STREET ALIGNMENT; AND
e. DRAINAGE.

IMPLEMENTATION STRATEGIES

1. The City shall encourage all of the urbanizable land within Tigard's Urban Planning Area to be within the City Limits.

2. The City shall direct its annexation policies to conform with and support the City's Comprehensive Plan.

3. The City shall phase annexations to allow for the incorporation of urbanizable land in a manner that is consistent with the Comprehensive Plan, and the Urban Planning Area Agreement, and to provide for orderly transition of urban services.

4. The City shall work toward establishing a workable, jointly approved growth management agreement with the Washington County. The agreement shall assure that:

a. Urban development inside Tigard Urban Planning Area (T.U.P.A.) will be encouraged to annex to the City of Tigard.

b. Significant differences between City/County Comprehensive Plan policies are reconciled for the unincorporated areas within the Urban Planning Area (T.U.P.A.).

5. Land use designations, if not already designated, shall be assigned to purposed annexation areas only after a thorough study addressing statewide Planning Goals, and City and neighborhood needs have been completed and adopted by the City.

6. The City shall accept, encourage, and assist in the preparation of annexation proposals of all levels within its Urban Planning Area (UPA).

7. The City shall actively seek to include all "unincorporated island" areas into the city.

8. The City shall provide a capital improvement plan (CIP) that will promote the development of services and facilities in those areas which are most productive in the ability to provide needed housing, jobs and commercial service opportunities in conformance with the policies of the Comprehensive Plan. The CIP shall emphasize the provision of needed services in established districts and those areas passed over by urban development.

9. The City shall cooperate with Washington County and all special districts share in the exchange of information on planning actions which have interjurisdictional impacts. Ample opportunity for review and comment shall be given prior to final action by a city, county or special district policy making body on a matter of mutual concern.
10. The City and County will negotiate the existing Urban Planning Area agreement which responds to the needs of both the City and County.

10.3 ANNEXATION OF LAND OUTSIDE THE URBAN GROWTH BOUNDARY

POLICIES

10.3.1 THE CITY SHALL CONSIDER ANNEXATION REQUESTS OUTSIDE THE TIGARD URBAN PLANNING AREA AND WITHIN THE URBAN GROWTH BOUNDARY CONSISTENT WITH POLICIES 10.1 AND 10.2 AND AMENDMENT OF THE AGREEMENT BETWEEN THE CITY AND THE COUNTY.

10.3.2 THE CITY SHALL DISCOURAGE EXPANSION OF THE TIGARD URBAN PLANNING AREA IN A MANNER WHICH WOULD RESULT IN AN IRREGULAR PLANNING AREA AND INEFFICIENT PROVISION OF PUBLIC FACILITIES AND SERVICES.
11. SPECIAL AREAS OF CONCERN

The purpose of this chapter is to address those areas within each Neighborhood Planning Organization that are of special concern to each particular area.

This chapter is divided by Neighborhood Planning Organization. The subsequent policies address a broad range of issues and relate directly to the main Citywide policies in Chapters 1-10. The larger, bold number adjacent to each policy refers to the Citywide policy of Chapters 1-10.

11.1 DOWNTOWN TIGARD URBAN RENEWAL DISTRICT

BACKGROUND

Citizens have expressed a desire to create a “heart” for their community: a place to live, work, and play, and to serve as a community gathering place.

Main Street and the surrounding area have served as Tigard’s historic center, dating back to around 1907. Planning for Downtown Tigard’s revitalization has been a long-term process, stretching back at least 25 years. The most recent effort dates back to 2002, with the announcement of plans for a Washington County Commuter rail line with a planned station in downtown Tigard. This inspired a small group of citizens and business owners to work on ideas for Downtown to capitalize on Commuter Rail. A state Transportation and Growth Management (TGM) grant facilitated the hiring of consultants and a more extensive planning process. A Task Force of 24 citizens was formed to guide the plan’s development. The planning process incorporated high levels of citizen involvement, including community dialogues, workshops, open house, and a public survey.

Tigard Downtown Improvement Plan (TDIP)

The TGM grant and planning process resulted in the Tigard Downtown Improvement Plan (TDIP). The TDIP set forth a vision to create “a vibrant and active urban village at the heart of the community that is pedestrian oriented, accessible by many modes of transportation, recognizes and uses natural resources as an asset, and features a combination of uses that enable people to live, work, play and shop in an environment that is uniquely Tigard.”

Urban Renewal Plan

An Urban Renewal Plan was developed to implement the TDIP. The tools provided by urban renewal, including Tax Increment Financing, are intended to attract private investment and facilitate the area’s redevelopment. Tigard voters approved the use of Tax Increment Financing for Urban Renewal in the May 2006 election.

FINDINGS

• Existing Conditions
  
  Land Use
  
  The Urban Renewal Area contains approximately 193.71 acres (including 49.57 acres of right-of-way) and comprises 2.6% of the City’s 7496 acres of total land area. It contains 193 individual properties. The current land uses are dominated by development with little pedestrian-friendly orientation. Outside of Main Street, the existing buildings do not create a sense of place and cohesive function, but rather appear to be spread out and auto-dependent. Block sizes are large for a downtown.

  In general, downtown properties have low improvement to land (I:L) ratios. Healthy I:L ratios for downtown properties range between 7.0 -10.0 or more. In Tigard’s Urban Renewal Area 2004-05 I:L averages were 1.43 for commercial properties and 2.79 for multi-family residential. (Report Accompanying the City Center Urban Renewal Plan.)

  Under existing conditions, Downtown is underdeveloped and lacks the mix of high quality commercial, office, residential and public uses suitable for an urban village.

  Transportation System
  
  The Area is served by two major transportation corridors (99W and Hall Blvd.) with heavy traffic levels. Many of the other Downtown streets lack complete sidewalks. In general, there are poor linkages to and within the Downtown.

  Railway tracks also bisect the Downtown. A planned system upgrade will make both commuter and freight
train operation more efficient and less disruptive to automobile traffic.

**Natural Features**  
Fanno Creek flows through downtown and is the most notable natural feature. The creek, part of its floodplain and associated wetlands are part of a 22-acre city park with a multi-use path.

**Current Zoning Districts and Comprehensive Plan Designations**  
The majority of the Downtown is zoned Central Business District (CBD). While the current CBD zone allows the mix of uses necessary for a successful downtown, the regulations lack the language to guide new development to be consistent with the preferred urban form. As a result, the area has developed without many of the pedestrian-oriented qualities specified in the Tigard Downtown Improvement Plan and Metro’s 2040 Growth Concept.

The Tigard Urban Renewal Area encompasses the original Plan area and several additional tax lots, which are zoned R-4.5, R-12 (PD), R-25, C-G (General Commercial) and C-P (Professional/ Administrative Commercial.) Several of these tax lots are located to the northwest of Highway 99W. These additional zones do not permit mixed use development, which is crucial for successful downtowns.

**Community Values**  
According to the Comprehensive Plan Issues and Values Summary, Downtown is important to Tigard residents; many use it on a weekly basis. Many would like it to see improvements so it will become a gathering place for the community.

*Tigard Beyond Tomorrow’s* Community Character & Quality of Life section, includes a goal to achieve a future where “the Main Street area is seen as a ‘focal point’ for the community,” and “a clear direction has been established for a pedestrian-friendly downtown and is being implemented.”

The passage of the Urban Renewal measure in May 2006 by 66% of voters also shows strong community support for Downtown’s revitalization.

**Metro Requirements for Town Center Planning**  
Title 6 of the Urban Growth Management Functional Plan requires local jurisdictions to adopt land use and transportation plans that are consistent with Metro guidelines for Town Centers.

**GOAL**  
The City will promote the creation of a vibrant and active urban village at the heart of the community that is pedestrian oriented, accessible by many modes of transportation, recognizes natural resources as an asset, and features a combination of uses that enable people to live, work, play and shop in an environment that is uniquely Tigard.

**POLICIES**

**11.1. Facilitate the Development of an Urban Village**  
11.1.1 New zoning, design standards and design guidelines shall be developed and used to ensure the quality, attractiveness, and special character of the Downtown as the “heart” of Tigard, while being flexible enough to encourage development.

11.1.2 The Downtown’s land use plan shall provide for a mix of complimentary land uses such as:  
   a) Retail, restaurants, entertainment and personal services;  
   b) Medium and high-density residential uses including rental and ownership housing;  
   c) Civic functions (government offices, community services, public plazas, public transit centers, etc)  
   d) Professional employment and related office uses  
   e) Natural Resource protection, open spaces and public parks

11.1.3 The City shall not permit new land uses such as warehousing; auto-dependant uses; industrial manufacturing; and industrial service uses that would detract from the goal of a vibrant urban village.

11.1.4 Existing nonconforming uses shall be allowed to continue, subject to a threshold of allowed expansion.
11.1.5 Downtown design, development and provision of service shall emphasize public safety, accessibility, and attractiveness as primary objectives.

11.1.6 New housing in the downtown shall provide for a range of housing types, including ownership, workforce and affordable housing in a high quality living environment.

11.1.7 New zoning and design guidelines on Main Street will emphasize a “traditional Main Street” character.

11.2 Develop and Improve the Open Space System and Integrate Natural Features into Downtown

11.2.1 Natural resource functions and values shall be integrated into Downtown urban design.

11.2.2 The Fanno Creek Public Use Area, adjacent to Fanno Creek Park shall be a primary focus and catalyst for revitalization.

11.2.3 Development of the Downtown shall be consistent with the need to protect and restore the functions and values of the wetland and riparian area within Fanno Creek Park.

11.3 Develop Comprehensive Street and Circulation Improvements for Pedestrians, Automobiles, Bicycles and Transit

11.3.1 The Downtown shall be served by a complete array of multi-modal transportation services including auto, transit, bike and pedestrian facilities.

11.3.2 The Downtown shall be Tigard’s primary transit center for rail and bus transit service and supporting land uses.

11.3.3 The City, in conjunction with TriMet, shall plan for and manage transit user parking to ensure the Downtown is not dominated by “park and ride” activity.

11.3.4 Recognizing the critical transportation relationships between the Downtown and surrounding transportation system, especially bus and Commuter Rail, Highway 99W, Highway 217 and Interstate 5, the City shall address the Downtown’s transportation needs in its Transportation System Plan and identify relevant capital projects and transportation management efforts.

11.3.5 Streetscape and Public Area Design shall focus on creating a pedestrian friendly environment without the visual dominance by automobile-oriented uses.

11.3.6 The City shall require a sufficient but not excessive amount of parking to provide for Downtown land uses. Joint parking arrangements shall be encouraged.

ACTION MEASURES

Staff will work on these short and medium term actions to implement policies that will support the creation of a vibrant, compact, mixed-use area with housing, retail and employment opportunities.

11.A Facilitate the Development of an Urban Village

11.A.1 Develop design guidelines and standards that encourage attractive and inviting downtown commercial and residential architecture with quality design and permanent materials, particularly in the building fronts and streetscape. Also develop appropriate density, height, mass, scale, architectural and site design guidelines.

11.A.2 Utilize form based code principles in ways that are consistent with state planning laws and administrative rules.

11.A.3 Adopt non-conforming use standards appropriate to a downtown in transition.

11.A.4 Develop code measures to mitigate any compatibility issues when new downtown development occurs in close proximity to the Downtown’s commuter parking.
11.A.5 Provide areas in the Downtown where community events, farmer’s markets, festivals and cultural activities can be held.

11.A.6 Designate the Downtown area as the preferred location for Tigard’s civic land uses.

11.A.7 Promote an awareness of the Downtown’s history through measures such as public information, urban design features and preservation of historic places.

11.A.8 Monitor performance of design guidelines, standards and related land use regulations and amend them as necessary.

11.B Develop and Improve the Open Space System and Integrate Natural Features into Downtown

11.B.1 Acquire property and easements to protect natural resources and provide public open space areas, such as park blocks, plazas and mini-parks.

11.B.2 Develop "green connections" linking parks and greenways with adjacent land uses, public spaces and transit.

11.B.3 Incorporate public art into the design of public spaces.

11.B.4 Enhance the landscape and habitat characteristics of Fanno Creek as a key downtown natural resource.

11.C Develop Comprehensive Street and Circulation Improvements for Pedestrians, Automobiles, Bicycles and Transit

11.C.1 Develop a circulation plan that emphasizes connectivity to, from, and within the Downtown in the design and improvement of the area’s transportation system, including developing alternative access improvements to Downtown, such as connections across Highway 99W.

11.C.2 Address public safety and land use compatibility issues in the design and management of the Downtown's transportation system.

11.C.3 Investigate assigning different roadway designations within the general area of the Downtown as means to support transportation access to Town Center development such as ODOT’s Special Transportation Area (STA) and Urban Business Area (UBA).

11.C.4 Implement an integrated Downtown pedestrian streetscape and landscape plan.

11.C.5 Acquire property and easements to implement streetscape and landscape plans, and develop needed streets, pathways, entrances to the Commuter Rail park and ride lot, and bikeways.

11.C.6 Express the themes of an urban village and green heart by utilizing the "unifying elements" palette from the Streetscape Design Plan to design streetscape improvements.

11.C.7 Emphasize sustainable practices in street design through innovative landscaping and stormwater management and provision of multimodal infrastructure.

11.C.8 Encourage sustainability features in the design of Downtown buildings.

11.C.9 Encourage the formation of a Downtown Parking and Transportation Management Association.

11.C.10 Incorporate the Downtown’s public investment / facility needs into the City’s Public Facility Plan and implementing Community Investment Plan.

D. Other Action Measures
11.D.1 Develop and implement strategies to address concerns with homeless persons and vagrancy in the Downtown and Fanno Creek Park.

11.D.2 Provide public, including members of the development community, with regular informational updates on Urban Renewal progress and an accounting of funds spent by the City Center Development Agency.

11.2 ASH AVENUE

Findings

• The extension of Ash Avenue is expected to increase traffic from the downtown area to the adjacent neighborhood; thus potentially increasing adverse impacts upon the adjacent neighborhood.

• Improvements to adjacent streets, e.g., Hill, O'Mara, etc., can alleviate traffic impacts on Ash Avenue.

11.2.1 ASH AVENUE SHALL BE EXTENDED ACROSS FANNO CREEK, ENABLING ACCESS TO THE NEIGHBORHOODS AND COMMERCIAL AREA WITHOUT USING PACIFIC HIGHWAY. DESIGN FEATURES SHALL BE USED TO SLOW TRAFFIC AND MAKE THE STREET AS SAFE AS POSSIBLE. ASH AVENUE SHALL BE DESIGNATED AS A MINOR COLLECTOR IN CONFORMANCE WITH THE MASTER STREET PLAN. DESIGN FEATURES AND MITIGATION MEASURES SHALL HOLD TRAFFIC VOLUMES TO THE MIDDLE LIMITS OF A MINOR COLLECTOR.

11.2.2 IMPROVEMENTS TO S.W. ASH AVENUE FROM S.W. HILL TO FANNO CREEK SHALL BE CONSTRUCTED AS A CONDITION OF DEVELOPMENT OF ADJACENT PROPERTIES. [THE] STREET IMPROVEMENTS ALONG WITH THE DEVELOPMENT OF A MAJOR COMMERCIAL SITE WILL INCREASE TRAFFIC ON ASH. A BARRICADE SHALL BE PLACED AT HILL STREET APPROXIMATELY AT THE END OF THE EXISTING PAVEMENT TO PROTECT [THE] NEIGHBORHOOD RESIDENTS FROM THE COMMERCIAL TRAFFIC.

11.2.3 METHODS OF MITIGATING THE TRAFFIC IMPACT ON THE NEIGHBORHOOD SHALL INCLUDE, IN THE FOLLOWING ORDER OF IMPROVEMENT, CONSTRUCTION:

a. IMPROVING S.W. MCDONALD STREET TO INTERIM MAINTENANCE STANDARDS TO ENCOURAGE TRAFFIC FROM SOUTH OF MCDONALD TO USE MCDONALD TO EXIT TO HALL AND/OR PACIFIC HIGHWAY;

b. IMPROVEMENTS TO THE RESIDENTIAL PORTION OF ASH FROM HILL TO FREWING. THESE IMPROVEMENTS COULD INCLUDE LIMITED PARKING, DELINEATION OF TRAFFIC LANES AND SIDEWALKS ON ONE OR BOTH SIDES OF THE STREET;

c. EXTENSION OF S.W. HILL TO S.W. O'MARA AND/OR IMPROVEMENT OF S.W. ASH FROM FREWING TO GARRETT;

d. EXTENSION OF S.W. O'MARA TO S.W. HILL PARALLEL TO S.W. ASH;

e. REMOVAL OF THE BARRICADE IN PLACE ON ASH AVENUE AT S.W. HILL;

f. IMPROVEMENT OF S.W. O'MARA STREET TO INTERIM MAINTENANCE STANDARDS TO ENCOURAGE AN ALTERNATE ROUTE;

g. INSTALLATION OF TRAFFIC INHIBITORS TO THE RESIDENTIAL PORTION OF ASH IF AND WHEN TRAFFIC VOLUMES EXCEED THE MIDDLE RANGE FOR A MINOR COLLECTOR. TRAFFIC INHIBITORS INCLUDE BUT ARE NOT LIMITED TO PLANTING ISLANDS, SPEED BUMPS, BUTTONS, TURNING RESTRICTIONS, LOAD LIMITS AND ENFORCEMENT.

11.3 NEIGHBORHOOD PLANNING ORGANIZATION #3
Many of the older residential neighborhoods in NPO #3 were developed along country roads that were lightly traveled, but which are now more heavily traveled. Some of this increased traffic results from local development, and some of it is through traffic which must use these roads since no arterial route has been built. Further increases in traffic, and consequent widening of these roads may adversely impact the quality of the residences along these roads. This is particularly the case with 121st Avenue and Gaarde Street, which have rights-of-way of 40 to 50 feet that are offset in some places.

The comprehensive plan for NPO #3, adopted by the City of Tigard in 1975, supported and implemented the conclusions of Carl Buttke, the consulting engineer who performed the traffic studies for the various NPO's. These conclusions were that 121st Avenue and Gaarde Street should be developed as two lane roads limited to a total of 30 feet "to avoid motorists from forming a third lane, but providing sufficient roadway width for turning vehicles." The 1975 plan included provisions for these roads to have pedestrian-bicycle paths and to have restrictions on parking. Also, low densities were planned for the neighborhoods serviced by these streets; one reason was to avoid further overloading of these streets with additional traffic resulting from higher densities.

The City of Tigard, in the 1975 plan for NPO #3, opposed a proposed Murray Boulevard Extension through NPO #3. It has been the opinion of both the City and the local residents that the Murray Boulevard Extension to Pacific Highway should be located to the west of Bull Mountain. Completion of this arterial linkage could remove much of the through traffic from what should be neighborhood collector streets.

Findings

• The development along most of the collector streets in NPO #3 is predominantly low density residences which are in good condition.

• The present right-of-way along much of S.W. 121st Avenue and S.W. Gaarde street is 40 to 45 feet wide with offsets in some places. Widening these streets to major collector standards would impact some of the existing homes on these streets.

• Some of the traffic now using S.W. 121st Avenue and Gaarde Street is not local, but rather through traffic, which could be better provided for by a properly located arterial connection between Murray Boulevard and Pacific Highway.

• Future development on the land along 121st and Gaarde will add to the traffic volumes on those streets.

• S.W. Gaarde Street and S.W. 121st Avenue south of Walnut both have many uncontrolled access points; this condition will require special design attention when street improvements are made.

• A direct connection between Murray Boulevard or Scholls Ferry Road, and Gaarde Street and/or 121st Avenue has been proposed many times in the past. A direct arterial connection proposal was considered in detail in the 1975 NPO #3 Plan and was emphatically rejected by the City of Tigard. It has also been rejected by the current NPO #3.

POLICIES

11.3.1 THE CITY SHALL CONSIDER THE FOLLOWING WHEN PREPARING STREET IMPROVEMENT PLANS THAT AFFECT S.W. 121ST AVENUE OR GAARDE STREET.

a. THE IMPACT ON THE EXISTING RESIDENTIAL STRUCTURES AND THE ALTERNATIVES WHICH HAVE THE MINIMUM ADVERSE EFFECT IN TERMS OF:

   1. REDUCING THE DISTANCE BETWEEN THE DWELLING AND THE STREET; AND

   2. NOISE IMPACTS.

b. THE EFFECT THE IMPROVEMENT WILL HAVE ON THE TRAFFIC FLOW AND THE POSSIBLE NEGATIVE EFFECTS ON OTHER STREET INTERSECTIONS.

c. MINIMIZING THE USE OF THESE STREETS AS PART OF THE ARTERIAL SYSTEM FOR THROUGH TRAFFIC.

11.3.2 THE CITY OF TIGARD SHALL WORK WITH OTHER GOVERNMENTAL BODIES FOR THE DEVELOPMENT OF AN ARTERIAL ROUTE CONNECTION FROM MURRAY BOULEVARD OR
SCHOLLS FERRY ROAD TO PACIFIC HIGHWAY. THIS ARTERIAL ROUTE SHOULD BE LOCATED WEST OF BULL MOUNTAIN, AND SHOULD NOT UTILIZE ROADS WHICH PASS THROUGH EXISTING RESIDENTIAL AREAS WITHIN TIGARD.

IMPLEMENTATION STRATEGIES

1. S.W. Gaarde Street and S.W. 121st Avenue (between Gaarde and Walnut) shall be developed as two-lane roads with pedestrian-bicycle paths, restricted parking and left turning lanes as needed at congested intersections.

2. The undeveloped land along S.W. 121st Avenue (south of Walnut) shall be planned for development in accordance with the locational criteria policies that apply to locating medium and higher densities close to arterials and in accordance with the policies for "Established" and "Developing" areas.

3. The Tigard Community Development Code shall require site design review for any development other than a single or two family structure. The site design review shall include review of street right-of-way and pavement location.

11.4 NEIGHBORHOOD PLANNING ORGANIZATION #4

POLICIES

11.4.1 IN THE TIGARD TRIANGLE (I.E. THAT AREA BOUNDED BY PACIFIC HIGHWAY, HIGHWAY 217, AND THE INTERSTATE 5 FREEWAY), IN THE MIXED USE EMPLOYMENT ZONE, HIGH DENSITY RESIDENTIAL DEVELOPMENT (I.E., 25 UNITS PER ACRE) SHALL BE A USE ALLOWED OUTRIGHT.

11.5 NEIGHBORHOOD PLANNING ORGANIZATION #5

Findings

• As Tigard has continued to develop, the locational advantages associated with the I-5 freeway, Highway 217 and the two railroad lines traversing the area have led to a considerable amount of office and industrial development along 72nd Avenue, south of Highway 217.

• The established residential area abutting the industrial area in NPO #5 has been adversely affected by the individual use, due to increased smoke, noise, odor or visual pollution.

• The pollution of existing vegetation and trees, and the planting of trees, provide an excellent means to both separate and buffer residential areas from industrial areas. These vegetative buffers exist along the western slopes bordering the Rolling Hills Subdivision and along Fanno Creek. The Rolling Hills Subdivision abuts industrially planned land on two sides and is within approximately 600 feet of land planned for heavy industrial use.

POLICY

11.5.1 THE CITY SHALL REQUIRE BUFFERING AND SCREENING BETWEEN RESIDENTIAL AREAS AND ADJOINING INDUSTRIAL AREAS AS A PRECONDITION TO DEVELOPMENT APPROVAL AS FOLLOWS:

a. ALL BUILDINGS ON INDUSTRIAL LAND SHALL BE SET BACK A DISTANCE OF 50 FEET FROM ANY PROPERTY LINE WHICH ABUTS A RESIDENTIALLY PLANNED AREA;

b. THE SITE PLAN SHALL PROVIDE FOR THE LEAST INTENSIVE PROPOSED USES ON THE SITE IN THE AREAS WHICH ABUT AN ADJOINING RESIDENTIAL PLANNED AREA; AND

c. BUFFERING AND SCREENING SHALL BE PROVIDED WITHIN THE 50-FOOT SETBACK AREA AS PROVIDED BY THE STANDARDS CONTAINED IN POLICY 6.6.1.
IT IS NOT THE INTENT OF THIS SUBSECTION TO REQUIRE THE ENTIRE 50 FEET TO BE LANDSCAPED PROVIDED THE STANDARDS IN 6.6.1 ARE MET IN WHICH CASE A PORTION OF THE BUFFER AREA MAY BE USED FOR PARKING; EXCEPT

1. NO STRUCTURE, PAVEMENT OR DEVELOPMENT MAY BE LOCATED WITHIN THE 50-FOOT SETBACK AREA SURROUNDING THE ROLLING HILLS SUBDIVISION EXCEPT LOTS # 39, 40, 41, 42, AND 43; AND

2. ALL EXISTING VEGETATION SHALL BE RETAINED AND MAINTAINED WITHIN THE 50-FOOT SETBACK AREA SURROUNDING THE ROLLING HILLS SUBDIVISION EXCEPT BEHIND LOTS # 39, 40, 41, 42, AND 43 WHERE SECTION 18.100.130, THE BUFFER MATRIX, APPLIES AND 18.100.080 APPLIES.

(Rev. Ord. 84-70)

IMPLEMENTATION STRATEGIES

1. The City shall work with the Neighborhood Planning Organizations and the affected property owners (both residential and industrial) in developing a design plan for the buffer areas between industrial and residential areas.

2. The Tigard Community Development Code shall include a tree cutting section which will minimize the cutting of trees on undeveloped land, and prohibit the cutting of trees within the designated Fanno Creek Greenway area.

3. The Community Development Code shall include standards for industrial developments that abut residential districts. At a minimum these standards shall include height, noise and lighting requirements.

11.6 ACTION AREAS

Action Areas are designated on the land use map where transit service and pedestrian traffic are encouraged in conjunction with Commercial, Light Industrial and Medium, Medium-High and High Density Residential Use.

GOALS

• Reinforce the mutually supporting nature of intense land uses and high accessibility of major transit stations.

• Encourage the use of public transit and facilitate that use through land use and design controls.

• Encourage and facilitate pedestrian traffic through land use, circulation patterns and design controls.

POLICIES

11.6.1 DESIGNATE AS ACTION AREAS CONCENTRATIONS OF GENERAL COMMERCIAL, LIGHT INDUSTRIAL, MEDIUM, MEDIUM-HIGH, AND HIGH DENSITY RESIDENTIAL WHERE THE FOLLOWING CRITERIA ARE MET.

a. THE AREA IS GENERALLY WITHIN ONE-QUARTER MILE OF A MAJOR TRANSIT CENTER OR TRUNK ROUTE.

b. AREAS WITH EXISTING USES WHICH ARE FREQUENTED BY PEDESTRIANS, OR VACANT LAND WHICH COULD SUPPORT USES WHICH WOULD BE PATRONIZED BY PEDESTRIANS AND/OR TRANSIT RIDERS.

c. AREAS WHICH ARE CURRENTLY AUTOMOBILE ORIENTED MAY BE INCLUDED IN ANTICIPATION OF A CHANGE OF USE OR REDESIGN OF PEDESTRIAN WAYS TO BETTER INTEGRATE THE USE INTO THE ACTION AREA.

11.6.2 DETERMINE PERMITTED USES THROUGH ZONING. FURTHER REGULATION OF USES IN ACTION AREAS SHALL BE ACCOMPLISHED WITH AN OVERLAY ZONE WHICH LIMITS SPECIFIC AUTOMOBILE ORIENTED USES AS PERMITTED USES AND ENCOURAGES A HIGHER LEVEL OF USES WHICH ARE PEDESTRIAN AND PUBLIC TRANSIT ORIENTED.
11.6.3 REQUIRE THAT ALL DEVELOPMENT PERMITTED IN ACTION AREAS BE DESIGNED TO FACILITATE PEDESTRIAN MOVEMENT WITHIN THE CENTER AND TO TRANSIT.

11.6.4 REVIEW AND UPDATE CITY PARKING ORDINANCES TO RECOGNIZE PARKING NEEDS IN ACTION AREAS.

11.6.5 DEVELOP A DESIGN PLAN FOR EACH ACTION AREA TO PROVIDE GUIDANCE FOR FINANCING PUBLIC IMPROVEMENTS AND INTEGRATING VARIOUS LAND USES. PLANS FOR AUTOMOBILE, TRANSIT, PEDESTRIAN AND BICYCLE CIRCULATION, OPEN SPACE, STORM DRAINAGE, SEWERAGE AND LIGHTING WILL BE INCLUDED. THE CITY WILL HAVE THE PRIMARY RESPONSIBILITY FOR DEVELOPING THE DESIGN PLAN BUT WILL COORDINATE WITH OREGON DEPARTMENT OF TRANSPORTATION AND TRI-MET.

11.6.6 DEVELOPMENT IN THE ACTION AREAS MAY BE SUBJECT TO SPECIAL CIRCULATION AND DESIGN CONSIDERATIONS DURING DESIGN REVIEW PRIOR TO COMPLETION OF THE DESIGN PLANS.

11.6.7 ENCOURAGE FORMATION OF LOCAL IMPROVEMENT DISTRICTS OR OTHER SUITABLE PROGRAMS FOR EACH ACTION AREA TO FINANCE IMPLEMENTATION OF THE DESIGN PLANS.

(Rev. Ord. 87-55)

11.8 NEIGHBORHOOD PLANNING ORGANIZATION #8

In 1989, a major real estate development company, together with interested residents and property owners, proposed to the city a redevelopment concept for the area generally bounded SW Locust, SW Hall Boulevard, Highway 217 and SW Greenburg Road. The development concept would require the redevelopment of an existing single family area to a commercial office campus, and would require that the city establish an urban renewal plan to help fund needed public improvements and other projects.

The development concept also required that the Comprehensive Plan designations for portions of the area be changed from Low Density Residential to Commercial Professional, followed by corresponding zone changes from R-4.5 or R-12 to C-P in conjunction with the approval of a conceptual development plan.

Findings

• The City of Tigard together with a major real estate development company recognize the potential for a major planned commercial and office development in the area. A public/private partnership has been established and an urban renewal plan, entitled the President's Parkway Development Plan, has been prepared in order to implement the commercial development concept.

• Preliminary studies completed for the President's Parkway Development Plan have identified needed transportation, public facility, flood control and other improvement projects which will be necessary to serve commercial and office development expected for the area.

• Additional studies will be needed as more specific development plans are approved which refine projects which are already identified, and identify other projects which are not now known.

• The area is characterized as transitional, that is an existing single family district that is converting to commercial use. Characteristics of the area which support this conversion and contribute to the decline in livability for single family residents include:
  - Poor condition of residential streets not built to city standards
  - Lack of sidewalks, parks and other recreational facilities
  - Poor drainage conditions and occasional flooding
  - High traffic volumes on residential streets causing congestion and safety problems
  - An elementary school in the area which is at the very edge of its service area, is inappropriately located, and is in proximity to congested streets with high traffic volumes
- Overall noise, congestion and high levels of activity in residential areas caused by the proximity of commercial and office uses
- Declining residential land and property values

• Adjacent neighborhoods north of SW Locust and east of SW Hall are predominately single family residential. Residents of these areas have expressed concern about the potential traffic, noise, visual and other impacts which may result from the redevelopment of the subject area. Detailed planning and impact assessment is needed to ensure these neighborhoods are adequately buffered from these potential impacts.

• In order to obtain a sound, unified development of high quality, an overall development plan for the entire area is needed. A zone change, consistent with the commercial-professional Comprehensive Plan designation will not create an overall development plan and, therefore, an instrument other than a simple zone change is needed.

• The most appropriate method to formulate an overall development plan is through the use of the Planned Development Overlay District, City of Tigard Community Development Code.

• A Comprehensive Plan map amendment to Commercial Professional must precede any zone change to C-P.

• Changing the zoning to C-P, for the area is shown on Map 1, in advance of redevelopment and conversion from existing single family uses to commercial uses may cause problems for the city and for property owners. Single family properties would likely be assessed for their zoned office potential, thereby increasing property taxes. It is not necessary or desirable to change the existing zoning until the land is needed for redevelopment consistent with the commercial Professional Comprehensive Plan Designation and an adopted Planned Development Overlay District.

• Necessary public improvements should be in place or planned to be constructed in time to support each phase of development, and to offset impacts caused by each development phase. Public improvements and other measures should address impacts within the redevelopment area and in adjacent neighborhoods. Development should not proceed until necessary funding for these public improvements is available and secured.

(Rev. Ord. 90-26; Ord. 90-07; Ord. 90-06)

11.9 WASHINGTON SQUARE REGIONAL CENTER

In 1995, Metro Council adopted a visionary plan for regional development. The 2040 Growth Concept described strategies to make the most efficient use of urban land in the face of dramatic population growth, to create and preserve livable neighborhoods, and to promote a useful, accessible transportation system.

One of the key elements of the 2040 Growth Concept, was the designation of regional centers. These are areas of concentrated commerce, local government services and housing served by high-quality transit. Washington Square is one of three regional centers in Washington County and one of nine in the region.

The 2040 Growth Concept resulted from extensive regional discussion about the future of the Portland metropolitan area. Metro, working with local jurisdictions, then developed the Urban Growth Management Functional Plan in 1996 to implement the Growth Concept. Local citizens and governments were then to determine the best way to create regional centers given the values, interests and needs of residents and businesses of that community.

The following findings and policies summarize the results of a thorough public discussion about the future of the Washington Square Regional Center area. It demonstrates the way the people of Tigard and Washington County incorporated their expectations for the future into the Regional Center Plan.

Findings

- With the adoption of the Urban Growth Management Functional Plan, local governments, businesses, residents and property owners in Washington County began a study of land use, transportation and other functions around Washington Square.

- In 1998, the Tigard City Council appointed 23 people to serve on the Washington Square Regional Center Task Force. Task Force members represent neighborhoods, schools, business and property
owners, state and local governments and public interest groups. The task force’s charge was to identify issues and set general policy for recommendations about land use, transportation, open space, aesthetics and other issues relevant to development around Washington Square. The Task Force also oversaw a public involvement process.

- The Task Force agreed on a study area that includes 1250 acres, with Washington Square Mall approximately in the center. The area is bounded by Fanno Creek on the west, SW Greenburg Road and Hall Blvd. on the east, Progress Downs Golf Course to the north, and Highway 217 and Ash Creek on the south.

- The Task Force members agreed on a set of principles that would guide development of all recommendations. These principles are as follows:

**Creation/Preservation of Area Identity**
- Reinforce a distinctive Regional Center while recognizing and respecting the character of the nearby residential community.
- Retain and develop quality housing, including affordable housing, for all income levels.
- Facilitate transitions from one use to another; for example, single to multifamily residential uses.
- Preserve and enhance Metzger Park and consider additional parks.
- Encourage environmentally friendly development.
- Try to keep historic trees.
- Build for our children: Have a sense of stewardship.
- Think creatively and be innovative in improving/maintaining quality of life.
- Consider market forces and development patterns.
- Maintain and preserve floodplains and wetlands.

**Government/Institutional Issues**
- Consider all political boundaries and facilitate cooperation among jurisdictions.
- Maintain neighborhood schools.
- Identify and reinforce what makes the learning (educational) environment viable.

**Transportation**
- Strive for a self-sufficient, connected transportation system.
- Consider transportation needs for the whole study area.
- Plan for a multi-modal transportation system that accommodates increased auto and non-auto travel needs.
- Respect and enhance local street networks and neighborhood livability.
- Maintain an acceptable level of service and safety on regional roads, minimizing the effect on regional roads outside the study area.
- Provide good transportation access to the rest of the region.
- Make the community accessible for all people and modes with connections for cars, bikes, pedestrians and transit.
- Maintain a high level of accessibility within and to the regional center.
- Use appropriate street and streetscape design.
- Encourage attractive, high quality development.
- Promote long-term viability for the area. Assure infrastructure is available prior to or with development.

**The Regional Center Plan Should**
- Be understandable to lay people
- Be implementable within a reasonable, staged period of time
- Help develop a sense of community with a common vision, hope and optimism
- Be based on statistics and facts for population, employment and other factors
- Use existing resources as much as possible
- Encourage compatible and complementary uses
- Contain solutions to common problems
- Avoid conflict with other regional centers.

- The Washington Square Regional Center study area includes land within the City of Tigard, the City of Beaverton and in unincorporated Washington County. The study covers approximately 1,074 acres exclusive of public rights-of-way and 1,250 total acres. About 4.2 percent of the net land area within the study area is vacant.
The Task Force evaluated all lands within the study area for future development or redevelopment capacity through 2020. Land identified as having development or redevelopment potential if it is currently vacant, has infill capacity, holds an opportunity for redevelopment or currently is used as a large (greater than one acre) surface parking lot. The vast majority of growth potential will come from redevelopment of existing structures and infill on sites currently used for surface parking. Over the next 20 years, approximately 192 acres of land will become available to accommodate employment and residential growth within the study area.

Metro’s Regional Urban Growth Management Functional Plan established “target growth capacity” for each jurisdiction in the region. The goal of setting these target numbers is for each part of the region to be prepared to accommodate housing and job growth. The target growth capacity for the Washington Square Regional Center is based on accommodating the following new jobs and housing units between 1998 and 2020:

**Employment:** 9,804 jobs 
Retail: 1,188 jobs 
Office: 8,436 jobs  
Lodging: 180 jobs

**Housing:** 1,500 units  
Residents: 2,530 people

A development program for the Washington Square Regional Center provides for the target employment and housing growth capacity. Areas including the districts around the Washington Square Mall, the Lincoln Center office complex, and an emerging mixed-use district south of Locust will develop at relatively high densities. Areas north of Locust and west of Highway 217 will develop at more moderate intensities, but generally greater than existing intensity in these areas. Density assumptions are summarized below:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>High Density:</th>
<th>Moderate Density:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>@ FAR 1.25</td>
<td>@ FAR 0.6</td>
</tr>
<tr>
<td>Retail</td>
<td>@ FAR 0.6</td>
<td>@ FAR 0.3</td>
</tr>
<tr>
<td>Lodging</td>
<td>@ FAR 1.0</td>
<td>@ FAR 1.0</td>
</tr>
<tr>
<td>Housing</td>
<td>@ 50 DU/Acre</td>
<td>@ 25 DU/Acre</td>
</tr>
</tbody>
</table>

This development program will require approximately 170-200 acres over the next 20 years. Adequate development and redevelopment capacity exists within the study area as a whole to accommodate development as long as densities assumed above are achieved.

The Regional Center Task Force reached agreements on basic elements of urban development, environmental protection, and transportation facilities. The Washington Square Regional Center Plan describes the vision for the regional center.

The Task Force demonstrated an impressive amount of interest in mixed-use neighborhoods and developments. Increasing land value and transportation costs will contribute to the desire of workers and employers for proximity of housing and work sites. The regional center’s urban design concept incorporates the need for improved transportation links, higher density, variety of land uses and services and a quality of environment necessary to create a desirable, livable community in the face of dramatic population growth.

Major roadways in the study area experience significant traffic congestion during weekday peak periods. Highway 217, Greenburg Road, Hall Boulevard and Scholls Ferry Road are subject to traffic delays. The major capacity constraints occur at the Hall Boulevard/Scholls Ferry Road intersection, the Scholls Ferry Road/Nimbus Avenue intersection, and the Greenburg Road/Highway 217 ramp intersections. In addition, Highway 217 itself is highly congested.

The majority of the arterial and collector streets in the study area have sidewalks. Scholls Ferry Road and Hall Boulevard have bike lanes within the study area. Highway 217 presents a major barrier for pedestrians and bicyclists. The only connections between the east and west sides of the highway in the study area are overcrossings on Hall Boulevard, Scholls Ferry Road and Greenburg Road. Of these three crossings, sidewalks are found only on Hall Boulevard and Greenburg Road, with bicycle lanes only on Scholls Ferry Road. The only bike lanes on the east side of the Washington Square Mall are on Hall Boulevard.
The Washington Square Transit Center is located in the northeast parking area of the Washington Square Mall. This transit center serves as a bus stop for routes 43, 45, 56, 62, 76 and 78. These routes connect Washington Square to transit centers in downtown Portland, Beaverton, Tigard and Lake Oswego, as well as providing service to the Tualatin area. A wider selection of transit tools could create a less congested, auto-dependent transportation system within and connecting to the study area.

In the future, those areas already identified as experiencing traffic congestion will continue to be clogged. In addition, other sections of Hall Boulevard, Greenburg Road, and Cascade Avenue and Oleson Road will also experience congestion. Traffic estimates do not predict congestion on local Metzger area streets directly east of Washington Square Mall.

The Tigard City Council approved the Washington Square Regional Center Plan, September 1999 (WSRC Plan) and related Comprehensive Plan and Zoning Code amendments, but withheld enactment of these policies and standards until a number of transportation, natural resource, stormwater, and parks and open space issues were addressed.

The City provided resources and secured grants from the Transportation and Growth Management (TGM) Program, State of Oregon, and the Department of Land Conservation and Development (DLCD), State of Oregon, to undertake additional technical studies to address these issues during the Phase II Implementation process.

The Phase II Implementation work effort focused on a number of issues that were first articulated by the Tigard City Council, and then defined as charges to the Task Force, Subcommittees. These charges were:

- Advise whether the major transportation improvements identified in the Regional Center Plan are physically feasible, and whether environmental or other permitting issues represent a “fatal flaw” for project implementation.
- Determine whether the proposed Regional Center Plan zoning creates the need for significant additional transportation improvements compared with existing zoning.
- Prepare a transportation demand management strategy for the Regional Center.
- Develop a long-range transportation implementation program that addresses public policy, financial resources and responsibilities, and short-term priorities.
- Map and confirm the hydrological characteristics (wetlands and fish habitat) of the Fanno and Ash Creek Watersheds within the Regional Center.
- Compile policies and standards for these watersheds related to development impacts, including the extent that parks and open spaces activities can exist within the 100-year floodplain area.
- Recommend modifications (as necessary) to the City’s natural resource regulations.
- Assess the stormwater management needs for the Regional Center Plan and a recommended approach for storm water management.
- Develop a long-term funding strategy for storm water management.
- Confirm the parks and open space needs for the Regional Center Plan and a recommended approach for identifying, acquiring, improving and maintaining parks and open space in the area.
- Develop a long-term funding strategy for parks/open space.

Based on the work of the Task Force, Technical Subcommittees, and consultation with the public, the following findings and conclusions are made:

- The results of the engineering and environmental analysis show that all of the transportation recommendations from the WSRC Plan can be implemented, and none of the projects are fatally flawed.
- A comparison of traffic trip generation potential of current zoning within the Regional Center to that proposed in the WSRC Plan showed very similar future peak hour trips, and that the transportation system required to serve the WSRC Plan is the same as that required to serve the area under current zoning.
- A long-term transportation implementation program is described later in this report, including a transportation demand management strategy. A financing strategy is recommended that produces sufficient revenues over a 20-year period to implement the improvement program.
- Detailed field reconnaissance was undertaken, and existing vegetative communities and wetlands within the Regional Center were mapped. It is recommended that the Tigard Wetlands and Stream Corridors Map be amended to reflect this work.
- Existing federal, state and local regulations and impact review procedures applicable to public and private developments within the Regional Center address the protection of identified natural resource areas. These existing regulations and any new regulations protecting natural
resources take precedence over any local zoning designations, existing or proposed. Proposed zoning designations applying to resource areas do not in and of themselves threaten natural resource values or potentially cause environmental impacts any more or less significantly compared to existing or less intensive zoning.

- Modifications to City of Tigard development standards that apply to sites that include natural resource areas along Ash and Fanno Creeks are recommended in order to minimize environmental impacts. Applicable development standards include waiving minimum FAR and residential density standards, adjusting building setbacks and others.

- The results of an assessment of existing and future flooding and water quality needs within the Regional Center showed that existing stormwater facilities are inadequate, and identified regional stormwater improvements remain unfounded.

- A long-term stormwater management program is described later in this report. A financing strategy is recommended that produces sufficient revenues over a 20-year period to implement the improvement program.

- A Greenbelt, Parks and Open Spaces Concept Plan is recommended which refines the proposals made in the WSRC Plan. All elements of the Concept Plan were found to be feasible.

- A long-term greenbelt, parks and open spaces implementation program is described later in this report. A financing strategy is recommended that produces sufficient revenues over a 20 year period to implement the improvement program.

- A financing strategy was developed in detail for transportation, stormwater, and parks & open space improvements. Based on the analysis of revenue expected from the variety of sources described in the strategy, adequate resources were determined to be available during the next 20 years to adequately fund the public improvements necessary to implement the WSRC Plan. The primary elements of the financing strategy are:

  - Aggressively pursue federal highway trust fund sources through Metro’s Metropolitan Transportation Improvement Program (MTIP). Metro estimates that approximately $874 million in federal highway trust fund money will be allocated directly to the Metro region during the years 2000 through 2020.

  - Establish priorities so that locally generated fees from existing businesses and residents and new development activity located within the Regional Center are focused on the transportation and infrastructure needs within the Regional Center.

  - Pursue the formation of local improvement district(s) (LIDs) where existing businesses and residents will directly benefit from improvements to existing transportation and stormwater facilities, or relatively modest new improvements are needed that benefit multiple property owners.

  - Aggressively pursue regional, state, and national grants and funding programs for specific improvements, and pursue dedications, donations and contributions from the private sector.

  - Establish an urban renewal district for the Regional Center as a local funding source for major transportation, stormwater, resource enhancement and parks and open space improvements that benefit the entire area. Based on the growth projection utilized for the Washington Square Regional Center Plan, approximately $92-162 million in accumulated urban renewal revenues would be available for project activities within the Regional Center over a 20-year period. An important recommendation of the financial strategy is the creation of a new urban renewal district. It is recommended that the urban renewal district be created to include areas within the City of Tigard, City of Beaverton, and unincorporated Washington County. This will assure that the entire Regional Center will be eligible for urban renewal investments.

POLICIES

11.9.1 THE CONCEPTS AND PRINCIPLES CONTAINED IN THE WASHINGTON SQUARE REGIONAL CENTER PLAN SHALL PROVIDE THE OVERALL GUIDING FRAMEWORK FOR MORE DETAILED IMPLEMENTING ACTIONS FOR THE AREA. THE IMPLEMENTING ACTIONS INCLUDE AT A MINIMUM:

a. Comprehensive plan map and zoning map amendments including transportation plan.

b. A public facilities plan for the area including a financing plan.

c. A transportation improvement plan for the area including a financing plan.
d. A parks and open space plan for the area including a financing plan.

e. A recognition of the Regional Center Boundary for the purpose of establishing local, regional and state funding priority in order to accomplish the concepts and principles of the plan.

11.9.2 THREE DISTINCT TYPES OF MIXED USE DISTRICTS SHALL BE ESTABLISHED FOR THE WASHINGTON SQUARE REGIONAL CENTER. THESE DISTRICTS ARE:

a. MIXED USE COMMERCIAL DISTRICTS (MUC). THE REGIONAL CENTER PLAN RECOMMENDS THAT LAND AROUND THE WASHINGTON SQUARE MALL AND LAND IMMEDIATELY WEST OF HIGHWAY 217 BE DESIGNATED A MIXED USE COMMERCIAL DISTRICT. PRINCIPAL DEVELOPMENT IN THESE AREAS WILL BE OFFICE BUILDINGS, RETAIL AND SERVICE USES. A ZONING DESIGNATION OF MUC WILL ALSO ALLOW MIXED-USE DEVELOPMENT AND HOUSING AT DENSITIES OF 50 UNITS AN ACRE. MUC DISTRICTS WILL ENCOURAGE LARGER BUILDINGS WITH PARKING UNDER, BEHIND OR ALONGSIDE THE STRUCTURES.

b. MIXED USE EMPLOYMENT DISTRICT (MUE). MIXED USE EMPLOYMENT DISTRICTS REFER TO AREAS WITH CONCENTRATIONS OF OFFICE, RESEARCH AND DEVELOPMENT, AND LIGHT MANUFACTURING INDUSTRIAL USES. COMMERCIAL AND RETAIL SUPPORT USES ARE ALLOWED, BUT ARE LIMITED. THE ZONING WILL PERMIT RESIDENTIAL DEVELOPMENT COMPATIBLE WITH THE DISTRICT'S EMPLOYMENT CHARACTER. LINCOLN CENTER IS AN EXAMPLE OF AN AREA DESIGNATED MUE-1, THE HIGH DENSITY MIXED-USE EMPLOYMENT DISTRICT. THE NIMBUS AREA IS DESIGNATED MUE-2, REQUIRING MORE MODERATE DENSITIES.

c. MIXED USE RESIDENTIAL DISTRICTS (MUR). THE MUR DESIGNATION IS APPROPRIATE FOR PREDOMINANTLY RESIDENTIAL AREAS WHERE MIXED USES ARE PERMITTED WHEN COMPATIBLE WITH THE RESIDENTIAL USE. AREAS WILL BE DESIGNATED HIGH DENSITY (MUR-1) OR MODERATE DENSITY (MUR-2).

11.9.3 NECESSARY PUBLIC FACILITIES INCLUDING SEWER, WATER AND DRAINAGE FACILITIES, SHOULD BE IN PLACE OR PLANNED TO BE CONSTRUCTED IN TIME TO SUPPORT NEW DEVELOPMENTS.

11.9.4 NECESSARY TRANSPORTATION FACILITIES, AS DETERMINED BY A TRAFFIC IMPACT ASSESSMENT, SHOULD BE IN PLACE OR PLANNED TO BE CONSTRUCTED IN TIME TO SUPPORT NEW DEVELOPMENTS.

(Rev. Ord. 02-12)

11.10 DURHAM QUARRY MIXED USE DEVELOPMENT AREA

In 1999, the City of Tigard, the City of Tualatin and the property owner, Washington County, agreed to work together to encourage a high quality, pedestrian-friendly, transit-oriented mixed use development on the site of the Durham Quarry site. Only 7.2 acres of the 28-acre site are within the City of Tigard, the remainder is within the City of Tualatin. The jurisdictions have been working together to develop an intergovernmental agreement wherein the City of Tigard would authorize the City of Tualatin to make land use and building permit decisions for the portion of the quarry site within Tigard.

POLICIES

11.10.1 THE CITY OF TIGARD WILL CONTINUE TO WORK WITH WASHINGTON COUNTY AND THE CITY OF TUALATIN TO HELP ASSURE THAT DEVELOPMENT WITHIN THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA PROVIDES A HIGH QUALITY URBAN ENVIRONMENT THAT EMPHASIZES PEDESTRIAN CONNECTIVITY.

11.10.2 THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA SHALL BE SUBJECT TO AN INTERGOVERNMENTAL AGREEMENT WITH THE CITY OF TUALATIN WHICH WOULD AUTHORIZE THE CITY OF TUALATIN TO MAKE LAND USE AND BUILDING PERMIT DECISIONS FOR THE PORTION OF THE QUARRY SITE WITHIN TIGARD.
11.10.3 A UNIQUE MIXED USE DISTRICT HAS BEEN ESTABLISHED FOR THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA KNOWN AS MUC-1.

11.10.4 THE MUC-1 DISTRICT IS INTENDED TO PROMOTE DEVELOPMENT WHICH ALLOWS A MIX OF USES, INCLUDING RETAIL, SERVICES, OFFICE AND RESIDENTIAL. THE MIXED USE COMMERCIAL DESIGNATION SHOULD ENCOURAGE DEVELOPMENTS THAT ALLOWS PEOPLE TO WORK, SHOP AND LIVE IN A COMPACT, PEDESTRIAN-ORIENTED COMMUNITY.

11.10.5 NECESSARY PUBLIC FACILITIES INCLUDING SEWER, WATER AND DRAINAGE FACILITIES, SHOULD BE IN PLACE, OR PLANNED TO BE CONSTRUCTED, IN TIME TO SUPPORT NEW DEVELOPMENT.

11.10.6 NECESSARY TRANSPORTATION FACILITIES, AS DETERMINED BY A TRAFFIC IMPACT ASSESSMENT, SHOULD BE IN PLACE, OR PLANNED TO BE CONSTRUCTED, IN TIME TO SUPPORT NEW DEVELOPMENT.

(Rev. Ord. 01-07)
12. LOCATIONAL CRITERIA

INTRODUCTION

This section contains locational criteria policies with respect to:

- Housing;
- Commercial uses;
- Offices;
- Industry; and
- Public utilities and facilities.

The policies and locational criteria apply to both legislative and quasi-judicial land use actions.

Conformance of quasi-judicial land use actions with this section of the Comprehensive Plan shall be determined by evaluation of the relationships between the proposed action (e.g., zone change, conditional development) and the applicable locational criteria. The applicable criteria are determined by the scale of the proposal, measured according to the scale standards found in the charts which follow.

It is intended that these locational criteria be construed in a flexible manner, in the interest of accommodating proposals which, though not strictly in conformance with the applicable criteria, are found to be in the public interest and capable of harmonious integration into the community. The burden of proving conformance of the proposal to the Comprehensive Plan should vary with the degree of change and impact on the community: the more drastic the change and the greater the impact, the more strictly the criteria should be construed.

12.1 RESIDENTIAL

The allowed housing types will be determined by the locational criteria, allowed densities and Community Development Code provisions related to each zoning district.

POLICY

12.1.1 THE CITY SHALL PROVIDE FOR HOUSING DENSITIES IN ACCORDANCE WITH:

a. APPLICABLE PLAN POLICIES;

b. APPLICABLE LOCATIONAL CRITERIA; AND

c. APPLICABLE COMMUNITY DEVELOPMENT CODE PROVISIONS.

(Rev. Ord. 85-03)

The following criteria will apply to the four residential densities:

1. Low Density Residential.
   A. The following areas are designated low density residential on the plan map:
      (1) Areas which are committed to low density development and not shown on the "buildable lands inventory" as vacant land;
      (2) Areas where street facilities are limited to collectors and local streets;
      (3) Areas having development limitations due to the topography, soil characteristics, drainage, high water table or flooding; and
(4) Areas with limited capacity for development in terms of facilities and services such as:

(a) Facilities:
   (i) Sewer
   (ii) Water
   (iii) Drainage
   (iv) Schools

(b) Services:
   (i) Police
   (ii) Fire
   (iii) Health

B. The following factors will be determinants of the density ranges allowed through zoning in low density residential:

(1) Areas which have been historically developed with large lots and which are determined to be committed land "on the buildable lands inventory" will remain zoned consistent with the existing development pattern;

(2) The capacity of facilities and services;

(3) Areas within walking distance of transit should be zoned for smaller lots; and

(4) Areas within close proximity to jobs, commercial areas and public facilities and services should be zoned for smaller lots.

2. Medium Density Residential

A. The following factors will be the determinants of the areas designated for medium density on the plan map:

(1) Areas which are not committed to low density development;

(2) Areas which have direct access from collector or arterial streets;

(3) Areas which are not subject to development limitations such as topography, flooding, poor drainage;

(4) Areas where the existing facilities have the capacity for additional development;

(5) Areas within one-half mile of public transportation; and

(6) Areas which can be buffered from low density residential areas in order to maximize the privacy of established low density residential areas;

B. The following factors will be determinants of density ranges allowed through zoning in the medium density planned area:

(1) The density of development in areas historically zoned for medium density development;

(2) The topography and natural features of the area and the degree of possible buffering from established low density residential areas;

(3) The capacity of the services;

(4) The distance to the public transit;

(5) The distance to neighborhood or general commercial centers and office business centers; and

(6) The distance from public open space.
3. Medium-High and High Density Residential

A. The following factors will be the determinants of the areas designated for high density on the plan map:

   (1) Areas which are not committed to low density development;

   (2) Areas which can be buffered from low density residential areas in order to maximize the privacy of established low density residential areas;

   (3) Areas which have direct access from a major collector or arterial street;

   (4) Areas which are not subject to development limitations;

   (5) Areas where the existing facilities have the capacity for additional development;

   (6) Areas within one-quarter mile of public transit;

   (7) Areas within one-quarter mile from neighborhood and general commercial shopping centers or business and office centers; and

   (8) Areas adjacent to either private or public permanent open space.

B. The following factors will be determinants of the density ranges allowed in the medium-high and high density planned areas should the City adopt more than one high density zone:

   (1) The topography and natural features of the area and the degree of possible buffering from established low density residential areas;

   (2) The capacity of the services;

   (3) The distance from public transit; and

   (4) The relationship of the site to existing neighborhood and general commercial centers and office and business centers.

IMPLEMENTATION STRATEGIES

1. The Community Development Code shall:

   a. Include a broad range of residential districts;

   b. Provide for schools, churches, parks and other quasi-public and public uses as conditional development in the residential districts;

   c. Require medium density, medium-high density and high density residential uses to be subject to the design review process, unless those developments have received detailed planned development or conditional development approvals;

   d. Require medium density and high density residential developments to provide a minimum of 20% of the gross area to be landscaped. The landscaping requirement may be reduced during the review process where it can be demonstrated that exceptional design will achieve:

      (1) An equally desirable development; and

      (2) An uncluttered appearance and openness intended by the landscaping requirement;

   e. Require the dedication of land or monetary contribution to the public for parks or recreation facilities.
12.2 COMMERCIAL

The Comprehensive Plan provides for four types of commercial development: neighborhood, general commercial areas, professional commercial and the central business district. It is the intent of the plan that:

1. Commercial areas be planned at a scale which relates its location, site and type of stores to the trade area to be served;
2. Surrounding residential areas be protected from any possible adverse effects in terms of loss of privacy, noise, lights and glare;
3. Commercial centers and uses be aesthetically attractive and landscaped;
4. Ingress and egress points not create traffic congestion or hazards;
5. Vehicle trips be reduced both in terms of the length of vehicle trip and total number of trips; and
6. The central business district is not included in the locational criteria because there is only one designated area.

POLICY

12.2.1 THE CITY SHALL:

a. PROVIDE FOR COMMERCIAL DEVELOPMENT BASED ON THE TYPE OF USE, ITS SIZE AND REQUIRED TRADE AREA.

b. APPLY ALL APPLICABLE PLAN POLICIES.

c. APPLY THE APPROPRIATE LOCATIONAL CRITERIA APPLICABLE TO THE SCALE OF THE PROJECT.

1. Neighborhood Commercial

Neighborhood commercial centers are intended to provide convenience goods and services within a cluster of stores. Convenience goods are goods which are bought frequently, at least weekly, and for which people do not engage in comparison shopping. The uses permitted in the neighborhood center include convenience markets, beauty shops, barber shops and repair shops. The range of uses is limited to those uses which can be sustained by a limited trade area.

A. Scale

(1) Trade Area. Up to 5000 people.
(2) Site Size. Two acre maximum.
(3) Gross Leasable Area. Varies.

B. Locational Criteria

(1) Spacing and Location

(a) The service area radius for a neighborhood commercial center shall be at least one-half [of a] mile.

(b) Commercial development shall be limited to one quadrant of a street intersection or where there is no street intersection, to one side of the street.
(2) Access
(a) The proposed center or expansion of an existing center shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on the street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the most intensive use allowed in the zone.

(b) The site shall have direct access from one of the following:
   (i) An arterial; or
   (ii) A collector street which will not direct traffic through local neighborhood streets.

(3) Site Characteristics
(a) The site shall be of a size which can accommodate [the] present and future uses, but shall not exceed two acres.

(4) Impact Assessment
(a) The scale of the project shall be compatible with the surrounding uses.

(b) Site configuration and characteristics, and relationship to the street system, shall be such that privacy of adjacent non-commercial uses can be maintained.

(c) It shall be possible to incorporate the unique features into the site design and development plan.

(d) Associated lights, noise and activities shall not interfere with adjoining non-residential uses.

2. General Commercial

General Commercial areas are intended to provide for major retail goods and services. The uses classified as general commercial may involve drive-in services, large space users, a combination of retail, service, wholesale and repair services or provide services to the traveling public. The uses range from automobile repair and services, supply and equipment stores, vehicle sales, drive-in restaurants to laundry establishments. It is intended that these uses be adjacent to an arterial or major collector street.

A. Scale
(1) Trade Area. Varies.

(2) Site Size. Depends on development.

(3) Gross Leasable Area. Varies.

B. Locational Criteria
(1) Spacing and Location
   (a) The commercial area is not surrounded by residential districts on more than two sides.

(2) Access
   (a) The proposed area or expansion of an existing area shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the various types of uses.

   (b) The site shall have direct access from a major collector or arterial street.
(c) Public transportation shall be available to the site or general area.

(3) Site Characteristics
(a) The site shall be of a size which can accommodate present and projected uses.
(b) The site shall have high visibility.

(4) Impact Assessment
(a) The scale of the project shall be compatible with the surrounding uses.
(b) The site configuration and characteristics shall be such that the privacy of adjacent non-commercial uses can be maintained.
(c) It shall be possible to incorporate the unique site features into the site design and development plan.
(d) The associated lights, noise and activities shall not interfere with adjoining non-residential uses.

3. Commercial Professional

Commercial Professional areas are intended for a diverse range of office uses and supportive uses and to promote user convenience throughout the City.

A. Scale
(1) Trade area. Varies
(2) Site size. Varies
(3) Gross leasable area. Varies

B. Locational Criteria
(1) Spacing and Location
(a) The Comprehensive Plan map fixes exact boundaries of the commercial professional area.
(b) The commercial professional area is not surrounded by residential districts on more than two sides.

(2) Access
(a) The proposed use or expansion of an existing area shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on [the] street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the various types of uses.

(3) Site Characteristics
(a) The site shall be of a size which can accommodate present and projected needs.
(b) The site shall have high visibility.

(4) Impact Assessment
(a) The site configuration and characteristics shall be such that the privacy of adjacent non-commercial uses can be maintained.
(b) It shall be possible to incorporate the unique site features into the site design and development plan.

(c) Associated lights, noise and activities shall not interfere with adjoining non-residential uses.

4. Community Commercial

The community commercial Plan designation is intended to provide locations for retail and service uses which have a primarily neighborhood orientation. Such facilities should be located so that their frequency and distributional pattern reflect their primary neighborhood orientation. Such facilities should not be so large or so broad in scope and services as to attract substantial amounts of trade from outside of surrounding neighborhoods, and shall be large enough to provide a variety of goods and services at one location. It is further the intent of this designation to restrict the size of such facilities and that the community commercial plan designation should not be located in close proximity to other commercial areas so as to avoid the appearance and feeling of typical commercial strip development.

A. Scale

(1) Trade Area: Surrounding residential and neighborhoods generally within a 1 and 1/2 mile radius.

Trade Area Density: The surrounding area potential residential density within one-half mile of a site to be designated for community commercial development shall average at least eight units per acre (as determined by the zoning of properties within one-half mile of the community commercial site. The intention of this criterion is to locate community commercial sites within a relatively short distance of a significant number of potential frequent users of the establishments within the commercial center. This also will provide the residents of the surrounding area with an opportunity to provide for their commercial and service needs within a distance that is reasonable for walking or bicycling. Lesser residential densities may or may exist within the assumed trade area at further distances from the site.

(2) Gross Floor Area. 30,000 to 100,000 square foot gross commercial floor area.

   Food sales up to 40,000 square foot per establishment;

   General retail sales up to 10,000 square foot per establishment as permitted uses;

   Other commercial sales and services facilities shall be allowed up to 5,000 square foot in size per establishment.

B. Locational Criteria

(1) Spacing and Location

   (a) Commercial development shall be limited to one quadrant of a street intersection.

   (b) Community commercial districts shall be spaced at least one-half mile from other sites which area designated for commercial retail use. Special consideration may also be given to providing a similar separation from non-commercially designated sites that involve retail use as part of a mixed use development, or to provide less than the minimum separation for commercially designated sites which are developed with non-retail uses.

(2) Access

   (a) The proposed community commercial district shall not be anticipated to create traffic congestion or a traffic safety problem. Such a determination shall be based on the capacity of adjacent streets, existing and projected traffic volumes, roadway geometry of adjacent streets, number of turning movements, and the traffic generating characteristics of the most intensive uses allowed in the zone.
(b) The site shall be located along an arterial or a major collector street as designated on the Comprehensive Plan Transportation Map. Sites should either be located at or adjacent to an intersection of a major or minor collector street with an arterial or at the intersection of two major collector streets.

(3) Site Characteristics

(a) The site shall be a minimum of two acres in size and a maximum of eight acres in size.

(4) Impact Assessment

(a) The scale and intensity of the project shall be compatible with surrounding uses and consistent with the provisions of this plan. Such compatibility and consistency shall be accomplished through the approval of a Site Development Review application contemporaneous with, and a part of, the approval of a zone change to the community commercial designation. The site plan approval may include conditions relating to site and building development through conditions of approval of a zone change for the site. Such considerations may include, but are not limited to, any of the site building and design guidelines deemed appropriate to become mandatory, access limitations, special setbacks, increased landscaping or buffering, limits on off-street parking spaces, coordinated building design, special design considerations for pedestrian and bicyclist access and safety and other building and site design standards imposed by the City in the plan amendment or rezoning process. Any major modification to the site plan, as determined by the Community Development Code, shall be processed as a zone change. Other modifications shall be processed in accordance with existing Code provisions.

(b) It is generally preferable that a community commercial site be developed as one unit with coordinated access, circulation, building design, signage, and landscaping. Parcels within a community commercial site, however, may be developed independently although the City may require that developmental aspects of individual parcels be coordinated through the development review process.

(c) Convenient pedestrian and bicyclist access to a development site from adjoining residential areas shall be provided where practical. Local street connections between community commercial sites and adjoining neighborhoods shall be considered on a case-by-case basis.

The site configuration and characteristics and relationship to the street system shall be such that privacy of adjacent non-commercial uses can be maintained.

(d) Access needs of individual parcels and uses shall be coordinated within a site so as to limit the number of access driveways to adjacent streets.

(e) Unique features of the site should be incorporated into the site development plan.

(f) Exterior lighting, noise, and activities associated with the Community Commercial district shall be controlled or mitigated so that they do not adversely affect adjacent residential uses and comply with any applicable provisions of the Tigard Municipal Code regulating noise, light, and nuisances. Operating hour restrictions may be placed on uses within the district, either through restrictions within the zoning district regulations or through conditions of approval of a Plan map amendment for a particular site.

IMPLEMENTATION STRATEGIES

1. The Community Development Ordinance shall:

a. Include a neighborhood commercial district, a general commercial district, a highway commercial district and a commercial professional district area.
b. Require that:
   (1) The areas be subject to site design review;
   (2) A minimum of 15% landscaping be provided; and
   (3) Necessary street improvements be made prior to development.

c. Prohibit single family residential uses in the neighborhood commercial and general commercial centers.

d. Allow for residential uses above the first story of commercial uses only in the central businesses and commercial professional districts.

2. As a part of the corridor study proposed for Pacific Highway (99W) by the Oregon Department of Transportation and the Metropolitan Service District, the City shall:
   a. Review the commercial development patterns that have occurred along Pacific Highway and look at ways to reduce access points along Pacific Highway; and
   b. Develop ways to consolidate new commercial development into commercial centers rather than strip commercial areas.

12.3 INDUSTRIAL

The intent of the Industrial land use designation is to:

1. Provide for the designation of suitable lands for industrial use;
2. Provide for economic growth and development;
3. Protect existing and potential lands suitable for industrial development from encroachment by non-industrial or incompatible uses;
4. Provide land for industrial use by type to minimize the impact on surrounding development; and
5. Take advantage of existing transportation facilities.

Industrial lands are classified as:

1. Heavy Industrial Lands are areas intended to provide for manufacturing, processing and assembling activities. Uses within this classification are characterized by large buildings and large storage areas and as having associated external effects such as smoke, noise, odor or visual pollution.

2. Light Industrial Lands are areas intended to provide for manufacturing, processing, assembling and related office activities. Uses within this classification are of a size and scale which makes them generally compatible with other non-industrial uses and which have no off-site effects.

The land use map designates specific areas of the city for industrial development. Over time, however, there may be a demand for new sites. Therefore, the following policy will apply in making such decisions.

POLICY

12.3.1 THE CITY SHALL REQUIRE THAT:
   a. SITES FOR HEAVY INDUSTRIAL DEVELOPMENT SHALL BE:
      (1) SEPARATED BY TOPOGRAPHY ESTABLISHED BUFFERS, TRANSPORTATION OR OTHER NON-RESIDENTIAL LAND USES FROM RESIDENTIALLY DEVELOPED AREAS.
      (2) LOCATED IN AREAS HAVING RAIL SERVICE, ARTERIAL OR MAJOR COLLECTOR ACCESS.
b. SITES FOR LIGHT INDUSTRIAL DEVELOPMENT SHALL BE:
   
   (1) BUFFERED FROM RESIDENTIAL AREAS TO ENSURE THAT PRIVACY AND THE RESIDENTIAL CHARACTER OF THE AREA ARE PRESERVED.

   (2) LOCATED ON AN ARTERIAL OR COLLECTOR STREET AND THAT INDUSTRIAL TRAFFIC SHALL NOT BE CHANNELED THROUGH RESIDENTIAL AREAS.

   c. THE SITE SHALL BE OF A SIZE AND SHAPE WHICH WILL PROVIDE FOR THE SHORT AND LONG RANGE NEEDS OF THE USE.

   d. THE LAND INTENDED FOR DEVELOPMENT SHALL HAVE AN AVERAGE SITE TOPOGRAPHY OF LESS THAN 6% GRADE, OR THAT IT CAN BE DEMONSTRATED THAT THROUGH ENGINEERING TECHNIQUES ALL LIMITATIONS TO DEVELOPMENT AND THE PROVISION OF SERVICES CAN BE MITIGATED.

   e. IT CAN BE DEMONSTRATED THAT ASSOCIATED LIGHTS, NOISE AND OTHER EXTERNAL EFFECTS WILL NOT INTERFERE WITH THE ACTIVITIES AND USES ON SURROUNDING PROPERTIES.

   f. ALL OTHER APPLICABLE PLAN POLICIES CAN BE MET.

IMPLEMENTATION STRATEGIES

1. Industrial development adjacent to existing or planned residential areas shall be conditioned to ensure that:

   a. The specific proposed use will be compatible with adjacent uses;

   b. The design of the facility and its site will not place visual or physical burdens on the surrounding areas;

   c. The operational characteristics of the facility will be compatible with surrounding uses and include[s] consideration of:

      (1) Hours of operation;

      (2) Delivery and shipping characteristics;

      (3) Noise;

      (4) Lighting; and

      (5) Other use characteristics.

2. The Community Development Code shall include the following provisions:

   a. A planned industrial park zoning district which will include development provisions which provide for:

      (1) A basic street and utility pattern which will permit flexibility in the size of industrial sites;

      (2) A circulation system that provides direct access to arterials or collectors that will not channel traffic through residential areas;

      (3) An internal circulation system which connects to adjoining sites;

      (4) A complete set of pre-imposed restrictions (e.g. deed restrictions, restriction covenants, etc.) that are enforceable upon all occupants of the industrial park including provisions for site improvement, building design, landscaping, sign control, off-street parking and site maintenance;

      (5) Evidence of continuing management responsibility to enforce restrictions established under the original development plan;
(6) Recognition of the differing transportation requirements of employees and service vehicles with adequate provision for public transit access; and

(7) A minimum of 25% of landscaping;

b. Design review provisions which apply to industrial development; and

c. Use classifications which exclude residential uses from industrial areas as primary uses.

12.4 COMMUNITY UTILITIES AND FACILITIES

Public utilities and facilities include public and private activities which are owned and operated for the benefit of the public. These include, for example, schools, libraries, hospitals, parks, golf courses, police and fire stations, water service, sewerage facilities and other operations performed as a public service. These facilities and uses have a direct effect on the public health, safety and welfare. They must be located in a manner which maximizes the net gains to the public and relates to the service area.

The purposes of this plan section are to:

1. Provide services where and when appropriate;

2. Locate community utilities and facilities where appropriate access and required services can be achieved;

3. Support community identity and development of community centers;

4. Reduce auto trips by clustering public services with other related commercial, office and industrial uses;

5. Minimize adverse impacts on adjacent development through site location and design guidelines; and

6. Promote reduced crime potential through design and location based on the principles of defensible space.

POLICY

12.4.1 THE CITY SHALL PROVIDE FOR THE LOCATION OF COMMUNITY FACILITIES IN A MANNER WHICH ACCORDS WITH:

a. THE APPLICABLE POLICIES IN THIS PLAN;

b. THE LOCATIONAL CRITERIA APPLICABLE TO THE SCALE AND STANDARDS OF THE USE.

The following list of uses are examples for each category defined under this section:

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1. Minor Impact Utilities and Facilities

A. Locational Criteria

(1) Access

(a) Access to a minor impact, utility or facility may be from a local street provided:

(i) Site access will not cause dangerous intersections or traffic congestion considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.

(2) Impact of the Proposed Change on Adjacent Lands

(a) The use shall be allowed provided:

(i) Associated lights and noise will not interfere with the activities and uses on surrounding properties;

(ii) Large scale construction and parking lots can be buffered from the adjacent uses;

(iii) Privacy of adjacent residential developments can be maintained;

(iv) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area; and

(v) Buffering can be used to screen the project from adjacent uses.

(3) Site Characteristics

(a) The use shall be allowed provided:

(i) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses;

(ii) The land intended for development has an average site topography of less than 25% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated; (NOTE: This does not apply to parks.)

(iii) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

2. Medium Impact Utilities and Facilities

A. Locational Criteria

(1) Access

(a) There is direct access from the site to a collector street and traffic will not be routed through local neighborhood streets.

(b) Site access will not cause dangerous intersections or traffic congestion considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.

(c) There is public transit within one-quarter mile of the site.

(2) Impact of the Proposed Change on Adjacent Lands
(a) It is compatible with surrounding uses, considering scale, character and use.
(b) It will reinforce orderly and timely development.
(c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.
(d) Large scale construction and parking lots can be buffered from the adjacent uses.
(e) Privacy of adjacent residential developments can be maintained.
(f) The site layout can respond to existing community identity and street patterns.
(g) Buffering can screen the project from adjacent uses.
(h) There is adequate area landscaping to filter the dust from the site area.

(3) Site Characteristics
(a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated. (Note: This does not apply to parks.)
(b) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.
(c) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.

3. High Impact Utilities and Facilities
A. Scale
(1) Access
(a) There is direct access from the site to a major collector street and traffic will not be routed through local neighborhood streets.
(b) Site access will not cause dangerous intersections or traffic congestion, considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.
(c) There is public transit to the site.
(2) Impact of the Proposed Change on Adjacent Lands
(a) It is compatible with surrounding uses, considering scale, character and use.
(b) It will reinforce orderly and timely development.
(c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.
(d) Large scale construction and parking lots can be buffered from the adjacent uses.
(e) Privacy of adjacent residential developments can be maintained.
(f) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area.
(g) Buffering can screen the project from adjacent uses.
(h) There is adequate landscaping to filter the dust from the site area.
(3) Site Characteristics

(a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated.

(b) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.

(c) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

4. Major Impact Utilities and Facilities

A. Locational Criteria

(1) Access

(a) There is direct access from the site to an arterial or freeway. Traffic will not be routed through local neighborhood streets.

(b) Site access will not cause dangerous intersections or traffic congestion, considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.

(c) There is public transit to the site.

(2) Impact of the Proposed Change on Adjacent Lands

(a) It is compatible with surrounding uses, considering scale, character and use.

(b) It will reinforce orderly and timely development.

(c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.

(d) Large scale construction and parking lots can be buffered from the adjacent uses.

(e) Privacy of adjacent residential developments can be maintained.

(f) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area.

(g) Buffering can screen the project from adjacent uses.

(h) There is adequate landscaping to filter the dust from the site area.

(i) Development can support and/or be compatible with the surrounding developments.

(3) Site Characteristics

(a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated.

(b) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.
(c) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

IMPLEMENTATION STRATEGIES

1. As a part of the ongoing planning program, the City shall:
   a. Prepare and maintain a data base inventory of existing public utilities and facilities; and
   b. Maintain community planning programs to determine community facility needs.

2. The following strategies should be addressed as a part of the Community Development Code:
   a. Provide for public utilities and facilities as conditional developments;
   b. Require design review approval for all facilities and uses; and
   c. Include standards related to access, circulation, parking, loading, storage, landscaping, and signs.

3. The City shall develop a capital improvements program which outlines public utility and facility needs provided by the County.

12.5 MIXED USE DISTRICTS

POLICY

12.5.1  THE CITY SHALL PROVIDE FOR MIXED USE DEVELOPMENTS IN ACCORDANCE WITH:

   a. APPLICABLE PLAN POLICIES;
   b. APPLICABLE PURPOSE STATEMENTS; AND
   c. APPLICABLE COMMUNITY DEVELOPMENT CODE PROVISIONS.

1. Mixed Use Commercial
   A. The purpose of the Mixed Use Commercial (MUC) land use designation is:
      1. To create a dense mixed-use commercial district that forms the commercial core of the Washington Square Regional Center;
      2. To create a high quality, mixed use commercial district, in conjunctions with the City of Tualatin, on the site of the former Durham Quarry. (Rev. Ord. 01-07)
      3. To provide opportunities for major retail goods and services, office employment, and housing in close proximity, and with good access to transportation services;
      4. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center within the City of Tigard.

2. Mixed Use Employment
   A. The purpose of the Mixed Use Employment (MUE) land use designation is:
      1. To create a mixed-use employment district that is complementary to the rest of the community and the region;
      2. To provide opportunities for employment and for new business and professional services in close proximity to retail centers and major transportation facilities;
3. To provide for major retail goods and services accessible to the general public, and minor retail goods and services accessible to the public which works and lives within the MUE district;

4. To provide for groups and businesses in centers;

5. To provide for residential uses which are compatible with and supportive of retail and employment uses;

6. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center and Employment within the City of Tigard.

3. Mixed Use Residential

A. The purpose of the Mixed Use Residential (MUR) land use designation is:

1. To create moderate and high density mixed use residential districts in close proximity to other mixed-use districts;

2. To provide opportunities for a variety of housing types and densities, and to produce that housing in ways that residents have a high degree of pedestrian amenities, recreation opportunities and access to transit;

3. To incorporate limited commercial and service uses within mixed-use projects that provide benefits and amenities to residents, but are compatible with residential uses.

4. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center within the City of Tigard.

Policies

12.5.2 The City shall apply a Mixed Use Commercial Land Use designation for areas shown as Regional Center in the Metro 2040 Growth Concept or to other areas identified by the City as appropriate for mixed use commercial development.

(Rev. Ord. 01-07)

12.5.3 The City shall apply a Mixed Use Employment Land Use designation for areas shown as Regional Center and Employment in the Metro 2040 Growth Concept.

12.5.4 The City shall apply a Mixed Use Residential Land Use designation for areas shown as Regional Center in the Metro 2040 Growth Concept.

Implementation Strategies

1. The Community Development Code shall:

   a. Include two Mixed Use Commercial Districts; MUC and MUC-1 (Rev. Ord 01-07)

   b. Include high density and moderate density Mixed Use Employment Districts;

   c. Include high density and moderate density Mixed Use Residential Districts.

   d. Require that:

      1. Minimum residential densities and floor area ratios (FAR) be achieved;
2. Certain commercial uses be limited so that a pedestrian-oriented development pattern is achieved;

3. Design standards for public improvements, site design, building design, signs and landscaping are achieved in order to create high quality, pedestrian-oriented developments;

4. All areas be subject to Site Development Review.

e. Provide for:

1. Limited adjustments, and phasing so that development standards can be achieved over time;

2. Limited adjustments in development standards, including minimum density and FAR requirements, in cases where adjustments are necessary to avoid environmental impacts;

3. Improvements to pre-existing uses and developments so that existing residents and businesses may continue to thrive;

4. Incentives to preserve and enhance significant wetlands, streams and floodplains.