Create a vibrant regional activity center enlivened with high-quality pedestrian and environmental amenities, taking advantage of the region’s light rail system.
AmberGlen Community Plan

Adopted by
Ordinance No. 5933, January 19, 2010

Prepared by
the City of Hillsboro

with
Cardno WRG
David Evans and Associates, Inc.
Johnson Reid Land Use Economics

2007 OHSU/AmberGlen Concept Plan
Prepared for the City of Hillsboro by
PB PlaceMaking
Leland Consulting Group
Kittelson & Associates, Inc.
SWCA Environmental Consultants

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ACKNOWLEDGEMENTS

Advisory Committees
Steering Committee
Steve Abel (Principal Financial Group)
Katie Brewer (Planning Commission)
Wink Brooks (City Alternate)
Nesha Cameron (Landowner)
Wing-Kit Chung (Portland Community College)
Stephen Cook (Landowner)
Ian Dees (Landowner)
Rob Dixon (Assistant City Manager)
Jillian Detweiler (Tri-Met)
Brad Farmer (Parr Lumber)
Jay Fischer (Principal Financial Group)
Charles Fleisher (Planning Commission)
Mark Fischer (StanCorp)
Laura Gentry (KG Investments)
Evan Gionet (Milestone Management)
Deborah Huff (StanCorp Alternate)
Mathew Klutznick (Streets of Tanasbourne)
Marvin Lamascus (Landowner)
Jim Mark (Melvin Mark Properties)
Dan Patrusich (Melvin Mark Properties)
Brian Newman (OHSU)
Willy Paul (Kaiser Permanente)
Brian Pierce (Unico)
John Pinkstaff (Lane Powell PC)

Technical Advisory Committee
Brian Harper (Metro)
Brian Newman (OHSU)
Ryan Van Gordon (NW Natural Gas)
Kevin Smith (Parks Department)
John Rinier (Fire Marshall)
Henry Reimann (Police Department)
Ricky Icenogle (Building Department)
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Marah Danielson (ODOT)
Jillian Detweiler (Tri-Met)
Jennifer Garland (School District)
Mark Knudson (Water District)
Gregg Leon (Washington County)
Steve Kelley (Washington County)
Carrie Pak (CWS)
Trent Lutz (PGE)
Meg Fenernees (DLCD)
Miranda Bateschell (Metro Alternate)
Jessica Tump (TriMet Alternate)

City of Hillsboro
City Council
Mayor Jerry Willey
Olga Acuña
Nenice Andrews
Doug Johnson
Aron Carleson
Ed Dennis
Mike Castillo

Planning Commission
John Coulter, President
Katie Brewer, Vice President
Steve Callaway
Charles Fleisher
Ray Lankford
Ross Mathews
Brian Roberts

City Staff
Pat Ribellia, Planning Director
Colin Cooper, Current Planning Supervisor/Project Manager
Paige Goganian, Urban Design Planner/Project Lead
Don Odermott, Transportation Planning Engineer
Mark Sullivan, Traffic Analyst
Doug Miller, Urban Planner II
Molly Marriott, Planning Technician II
Dawn Duray, Planning Technician II
Sabrina Henkhaus, Urban Design Intern

Consultant Team
Cardno WRG
Mimi Doukas, Principal
Michael Cerbone, Project Manager
Ryan Givens, Senior Community Planner
Seth Otto, Planner
Michele Simantel, Planner

David Evans & Associates
Scott Harmon, Project Manager
Joshan Rohani, Traffic Analyst

Johnson Reid Land Use Economics
Bill Reid, Principal
Jerry Johnson, Principal
INTRODUCTION

Purpose

The AmberGlen Community Plan establishes coordinated goals, policies, and implementing actions to guide development and implement the community’s vision. Adoption of the AmberGlen Community Plan establishes the policy framework required to amend land use regulations for higher intensities and densities, establish capital improvement projects, and pursue funding mechanisms.

Concept planning established a vision, guiding principles and development concept for:

- Creating intensive, mixed-use development and achieving higher levels of density close to major employers;
- Providing high quality amenities and an urban, pedestrian environment; and
- Supporting regional transportation infrastructure.

The AmberGlen plan area provides a unique opportunity for transforming suburban development. Development of the area as an urban community connects the adjacent Tanasbourne Town Center to the region’s Westside Light Rail line and creates a vibrant, mixed-use regional center in a suburban location. Served by US Hwy 26, close to the region’s intensive high-tech industrial cluster and major retail and service industry employers, the AmberGlen area is an ideal location to plan for intensive urban development.

The AmberGlen Community Plan provides a comprehensive guide for land use decisions necessary for accomplishing the vision for an urban regional center.

WHY HERE? WHY NOW?

- Strong interest by developers & owners of several large properties
- Vacant, underdeveloped land
- Regional growth trends
- National lifestyle trends
- Market demographic trends
- Adjacent to major Westside employers
- Access to transportation infrastructure - Highway 26 and light rail
- The Right Place – successful Tanasbourne Town Center has achieved Regional Center scale
Plan Organization

The AmberGlen Community Plan contains the following sections:

**Background** - Identifies the plan area, context, planning process and public involvement.

**Vision and Concept Plan** - The vision statement and guiding principles embody community aspirations, and provide the basis for development of the Concept Plan.

Chapter I:  Parks and Open Space

Chapter II:  Land Use

Chapter III:  Transportation

Chapter IV:  Infrastructure

Chapter V:  Economic Development

**Plan Chapters**

Each chapter contains the following sections:

- Existing Conditions
- Plan Concepts
- Goals, Policies and Actions

**Goals, Policies and Actions**

Goals and policies capture concepts embodied in the vision. Goals indicate a desired end. Policies state what must be done to achieve a desired end by identifying the City’s position. Action statements outline projects or standards which implement goals and policies. The goals, policies and actions are interrelated, and work together to guide implementation of the vision.
BACKGROUND

Context

Plan Area
The plan area encompasses approximately 606 acres located near Hillsboro’s growing residential and employment populations. The plan area is bounded by NW Cornell Road to the north, NW 206th Avenue to the west, NW 185th Avenue to the east and the Westside Light Rail line to the south. The Bronson Creek corridor traverses the plan area creating two distinct subareas. The western area includes the AmberGlen Business Center and the Oregon Graduate Institute. The eastern area includes the Oregon Health Science University (OHSU) West Campus and a mix of emerging multi-family residential, education and commercial uses. The Willow Creek Transit Center and Quatama light rail stations are located at the southern boundary. The plan area features significant sites of vacant or under developed land.

Regional Context
The City of Hillsboro is one of the fastest growing cities in the Portland metropolitan region and currently has a population nearing 90,000 people, making it the 5th largest city in the state. Hillsboro has become the center of high tech investment in Oregon, with nearly 25,000 employed in this industry. Growth has been spurred by the City’s availability of developable industrial land, employment opportunities, desirable neighborhoods, quality schools, and regional transportation infrastructure. This success in employment growth has resulted in a jobs-to-housing imbalance, creating a need for additional residential development.

Located adjacent to the plan area, the Metro 2040 Growth Concept designated the Tanasbourne area as a Town Center in 1995. Suburban in form, “Tanasbourne” grew to become one of the largest mixed-use centers in the region. In 1999, the City adopted the Tanasbourne Town Center Plan to direct new mixed-use growth toward regional allocations for housing and jobs, and to support Metro 2040 Growth Concept goals for a balanced mode split and compact, efficient development. In contrast to the AmberGlen plan area and Hillsboro’s other Town Centers, the Tanasbourne Town Center is not supported by light rail transit.

Recent Tanasbourne development features a mix of urban, pedestrian-oriented business and open space amenities. In 2007, Town Center commercial development totaled nearly 3.5 million square feet including over one million square feet of retail. Multi-family residential development totaled approximately 4,000 dwelling units according to the OHSU/AmberGlen Concept Plan, Plan Summary, March 2007 provided in Appendix A. Recent retail projects such as the Streets of Tanasbourne and Tanasbourne Market Center strengthen the focus on urban amenity businesses and feature popular anchors like REI and Whole Foods Market. Growth continues with Kaiser Permanente’s Westside Medical Center (one-million square feet) currently under construction. Tanasbourne Town Center is the largest in the region at 469 acres with densities of 8 people/acre compared to the regional average of 5 people/acre.1

In February 2009, City and regional leaders and stakeholders affirmed a commitment to pursue designation of the combined Tanasbourne Town Center and AmberGlen Community Plan areas as a Metro 2040 Regional Center.

1 STATE OF THE CENTERS REPORT. METRO, JANUARY 2009.
Figure A: AmberGlen Study Area and Context Map
City of Hillsboro

**TANASBOURNE | AMBER**

**Early 1980’s**
Standard Insurance creates “Tanansbourne”
Standard Insurance begins development of 850 acres, the initial phase of the master plan for “Tanansbourne.” It was to become one of the region’s largest, horizontal mixed-use developments.

**1991**
AmberGlen Business Center breaks ground
Bircher Development & Investments and State Farm Insurance, in a development agreement with Amberjack, break ground on the AmberGlen Business Center. The master plan identifies a multi-tenant, 26-building, 1.25 million square-foot research and development facility on 217 acres adjacent to OHSU.

**1996**
City adopts Station Community Plans and Campus Zones for OHSU/AmberGlen
Zoning supports existing “campus” uses and is intended to foster transit-oriented, pedestrian-sensitive, and auto-accommodating development. AmberGlen Business Center is designated: Station Community Business Park (SCBP), Oregon Health Sciences University designation: Station Community Research Park (SCRP).

**1998**
City Initiates Parks & Open Space Investments
Rock Creek Trail construction in 1998 begins the City’s ongoing investment in parks and open spaces. With additional funds from Metro, 1.5 miles of paved nature trail connects residential, commercial and industrial neighborhoods.

**1999 / 2004**
City adopts Tanansbourne Town Center Plan & Zones
City of Hillsboro adopts Tanansbourne Town Center Plan (1999) and designates Mixed Use Commercial zones (2004) to direct new mixed-use growth in support of Metro 2040 Growth Concept goals and allocations for housing and jobs.

**2006 / 2007**
City completes Concept Plan for OHSU/AmberGlen area
The City of Hillsboro initiated the OHSU/AmberGlen 2006 to achieve higher levels of density close to its provide high-quality amenities & a pedestrian-friendly environment supported by regional transportation infrastructures to transform all of Tanansbourne to a major regional activity center. In 2007, the Concept Plan was adopted as a collaboration between property owners, Tanansbourne area stakeholders, the County, City, and Community officials.

The Concept Plan identifies a vision, guiding principles, program and implementation tools for creating a viable mixed-use development. The concept is close to the dynamic Tanansbourne Town Center, and regional in including Highway 26 and the Westside Light Rail. The community is envisioned to be a regional landmark sustainability.

**Metro adopts 2040 Growth Concept**
The Metro 2040 Growth Concept was adopted in 2010. The concept is intended to provide long-term management of the region.

**MAX Westside Light Rail Opens**
Planning for a light rail system on Portland’s west side began in 1978. In 1999, the local jurisdictions asked to add an extension to the Westside project to extend the line to Hillsboro due to rapid development. Environmental studies for this 6.5-mile addition, mostly located on an abandoned U.S. highway, progressed rapidly, and in 1994, Hillsboro became the western terminus of the Westside project. The Westside MAX line connecting Hillsboro to

City of Hillsboro

AmberGlen Community Plan
Area Planning Timeline

Plan Implementation Next Steps

The Concept Plan is the product of the initial phase of planning, intended to establish the vision to compel and guide the project through the Implementation Process...

**AmberGlen Community Plan**

The following implementation tasks will be addressed in the following months during the AmberGlen Community Plan process:

- Revise Market Feasibility
- Establish Phasing Strategy
- Refine Development Plan
- Analyze Transportation System; Identify projects/funding
- Create Memorandum of Understanding
- Analyze feasibility of Urban Renewal District
- Develop AmberGlen Community Plan
- Adopt AmberGlen Community Plan as part of the Comprehensive Plan

Refinement of the Development Plan concept was initiated by motivated property owners to compare the physical Concept Plan against existing property holdings. Additional refinement to address public and private objectives will be accomplished during the Community Plan process.

The City of Hillsboro in partnership with stakeholders is preparing an AmberGlen Community Plan for inclusion in the City’s Comprehensive Plan. Adoption of the area plan establishes the regulatory framework required to:

- Amend land use regulations for higher intensity uses and densities
- Implement capital improvement projects
- Pursue funding mechanisms (tax increment financing, SDCs, & others)

**Feb 17, 2009**
City Council/Planning Commission Work Session

- Fall 2009: Adopt Community Plan
- 2010: Adopt Zoning/Development Standards
- 2010 - 2011: Establish Public Funding Mechanisms

- Potential Metro 2040 Regional Center designation for Tanasbourne/AmberGlen
- Potential extension of a High Capacity Transit Line along NW 194th Avenue with service to Tanasbourne/AmberGlen
Planning Process

A summary of planning for the Tanasbourne/AmberGlen area is provided in the Area Planning Timeline on the preceding pages.

The City of Hillsboro initiated concept planning for the AmberGlen plan area in 2006 to achieve higher levels of density close to major employers, provide high-quality amenities, support regional transportation infrastructure, and to transform the combined Tanasbourne/AmberGlen areas into a regional center. Public goals included meeting ongoing demand for jobs and a variety of housing, improving the jobs/housing balance, relieving pressure on established neighborhoods, planning for an uncertain energy future, fully supporting the region's investment in light rail, and providing a model development for urban sustainability.

Completed in 2007, the OHSU/AmberGlen Concept Plan (2007 Concept Plan) was a collaborative effort between property owners, Tanasbourne area stakeholders and City, County, Metro and State officials. The Plan Summary for the 2007 Concept Plan is provided in Appendix A. The 2007 Concept Plan identified a vision, guiding principles, development program, and implementation tools for creating a vibrant, mixed-use district.

In 2009, the City initiated a process to refine the OHSU/AmberGlen Concept Plan for adoption as a Community Plan within the City of Hillsboro Comprehensive Plan. Refinement of the development concept was initiated in 2007 by motivated property owners to compare the 2007 Concept Plan to existing property holdings. In February 2009, City and regional leaders and stakeholders discussed and affirmed a shared commitment to the vision and aspirations established in the 2007 Concept Plan. They also agreed to pursue designation of the combined Tanasbourne Town Center and AmberGlen plan areas as a Metro 2040 Regional Center, and a high-capacity transit link such as light rail through the AmberGlen plan area to connect to employment centers to the north and west. Additional plan refinements were made to address market feasibility, design of the central park and open space, and additional input received from the public and plan area stakeholders. The AmberGlen Community Plan process included transportation system analysis, identification of potential projects, and analysis of funding mechanisms including tax increment financing.
Public Involvement

Stakeholder Interviews
In July of 2006, staff conducted 50 stakeholder interviews – with major property owners, real estate professionals, public agency representatives, residents and other key representatives. The interviews offered a unique opportunity for stakeholders to speak candidly about the project and give staff a wealth of perspective and knowledge to guide the planning efforts.

Steering Committee & Technical Advisory Committee
Throughout the entire process, plan development was guided by a City-formed Steering Committee composed of property owners and residents within and surrounding the plan area and other key stakeholders, and a Technical Advisory Committee consisting primarily of public agency representatives. Both the Steering Committee and Technical Advisory Committee were heavily engaged in the planning process, attending seven meetings and providing staff with valuable technical guidance and perspective.

Design Process
An intensive design charrette was held over six days in August of 2006 and provided the basis for the development program and plan concepts. Steering Committee members and stakeholders created several design alternatives for the plan area and developed guiding principles. Discussions were held with developers who had worked on similar projects in the Portland area to give attendees further guidance. This design process produced a preliminary concept plan that was later reviewed and refined for adoption by the Steering Committee and Technical Advisory Committee.

Open Houses
Public open houses were held during the concept plan phase in August, 2006 and September 2006 to solicit input from citizens on the vision, guiding principles and development concepts. The public was once again invited through area mailings, email distribution and local press releases to public open houses held in April, June and September, 2009 during plan refinement. During plan refinement, public participant’s comments focused on the parks and open space framework, sustainability features, potential high-capacity transit, and transportation.

Public Work Sessions
Throughout the planning process, the Hillsboro City Council and Planning Commission held four joint work sessions and one additional Planning Commission work session to review the plan’s progress. Additionally, a tour of the plan area and the Pearl District in Portland highlighted important design elements of the AmberGlen Community Plan such as the value of open space, transitions between public and private spaces, and density.

Website & Communication
A project website provided updated information on public meetings, meeting materials and summaries, plan documents and contact information throughout the planning process. Feedback was received via email or phone calls by project staff and an email list was maintained to ensure all interested citizens and stakeholders were kept informed on the plan's progression and upcoming events. Comments received throughout 2009 informed refinements to plan concepts and the Goals, Policies and Action items presented in this Community Plan.

Documentation of stakeholder interviews, public meetings and comments received are provided in Appendix B.
Public Involvement Summary

Stakeholder Interviews – 7.26.06 to 7.27.06
The project team conducted 50 stakeholder interviews with individuals invested in the outcomes of the planning process.

TAC & SC Meeting – 8.2.06
Attendees discussed the project description, and schedule. An overview of existing conditions and stakeholder interviews was also covered.

Open House – 8.21.06
Over 30 residents and interested parties were introduced to the strategies, objectives and tasks proposed in the OHSU/AmberGlen plan process.

Design Process – 8.24.06 to 8.29.06
The intensive design charrette entitled groups creating several design alternatives for the plan and developing guiding principles. The design charrette defined the scope of the concept.

TAC & SC Meeting – 8.30.06
The meeting included a discussion of two alternatives created during the charrette design exercise.

Open House – 10.9.06
Nearly 25 area residents and interested citizens were introduced to the Draft Concept Plan for OHSU/AmberGlen.

TAC & SC Meeting – 11.15.06
Concept Plan refinements, transportation analysis, and infrastructure and public services were discussed.

City Council / Planning Commission Work Session – 8.2.07
OHSU/AmberGlen vision was presented and land use concepts were discussed.

Transportation Metropolitan Advisory Committee – 9.7.07
The project team presented the OHSU/AmberGlen vision, land use concepts and transportation issues.

City Council & Planning Commission Work Session – 11.1.07
A progress report and discussion regarding the OHSU/AmberGlen plan updates was given.

Stakeholder Meeting – 2.13.08
Key stakeholders and property owners met to discuss future plans and a revised concept plan that acknowledges current development.

Stakeholder Meeting – 6.17.08
Attendees reviewed the revised stakeholder’s Refinement Plan and discussed the possibilities of public funding.

Stakeholder Meeting – 10.22.08
The Concept Plan and the Refinement Plan were discussed and a review of the project work scope and transportation work scope were covered.

Stakeholder Meeting – 11.19.08
Future project plans were discussed and an economic study and transportation study work scope was presented to attendees. A request for steering committee member volunteers was made.

City Council / Planning Commission Work Session – 2.17.09
The meeting included special guests Metro Councilors David Bragdon & Katherine Harrington, Rick Van Beveren of Tri-Met, and selected members of the Steering Committee. Attendees reviewed OHSU/AmberGlen Concept Plan & Stakeholder Preferred Alternatives and requested direction for the refinement of the AmberGlen Community Plan.

TAC & SC Meeting – 3.31.09
Attendees reviewed direction provided at the City Council /Planning Commission Joint Work Session. Staff presented alternative plan maps that combined the OHSU/AmberGlen Concept & Stakeholder Preferred Alternative Maps.

Open House – AmberGlen Business Park – 4.1.09
Information about the AmberGlen planning area and draft concept plan refinements were presented to the public. Approximately 45 local residents, employees, and other interested parties attended.

TAC & SC Meeting – 4.15.09
A presentation on urban amenity values and public park space was given by Johnson-Reid. Attendees discussed refinements of the plan alternative.

TAC & SC Meeting – 6.24.09
Johnson-Reid provided preliminary information regarding retail capacity and the viability of proposed residential development. Draft land use polices and transportation modeling updates were also presented and discussed.

Open House – AmberGlen Business Park – 6.25.09
Information regarding the market feasibility analysis, plan refinements, transportation planning, and draft land use policies were presented. Approximately 25 local citizens attended to offer feedback.

City Council / Planning Commission Joint Work Session – 8.4.09
Review of the outcome of the February 17, 2009 work session was covered as well as AmberGlen Plan progress and refinements.

City Parks Commission Presentation – 8.25.09
The overall Plan with an emphasis on Parks and Open Space was presented to attendees.

TAC & SC Meeting – 9.10.09
AmberGlen concept plan map refinements, draft Goals Policies and Actions, urban renewal feasibility analysis, and preliminary transportation findings were presented and discussed.

Public Open House – AmberGlen Business Park – 9.17.09
A draft of the AmberGlen Community Plan and Map were reviewed by attendees. Approximately 12 interested citizens attended.

AmberGlen and Pearl District Tour – 10.10.09
A tour of the AmberGlen area and Pearl District in Portland highlighted some of the important design elements of the AmberGlen Community Plan: open space, transition between public & private spaces, etc.

Planning Commission Work Session – 10.28.09
An in-depth review of the Draft AmberGlen Community Plan and Map was covered, as well as transportation modeling results.

Meeting with Citizen Participation Organization – 11.2.09
Attendees discussed and offered feedback on the Draft AmberGlen Community Plan and relating transportation issues.
Vision and Concept Plan

Public and private stakeholders have repeatedly affirmed enthusiastic support for the vision developed at the outset of the planning process. The vision is intentionally big and focused on creating a vibrant regional center with a unique and widely recognizable identity.

Vision Statement

“Create a vibrant regional activity center enlivened with high-quality pedestrian and environmental amenities, taking advantage of the region’s light rail system.”

Guiding principles were also developed to define the recommended overall theme and identity for the community, and to guide concept plan design and refinement. The guiding principles serve as a “touchstone” against which plan concepts and program details are “tested” to ensure consistency with the vision.

Guiding Principles

1. Urban/Green
2. Third Places
3. Regional Landmark
4. Big: Create catalyst at outset
5. Connectivity
6. Market Flexibility
7. Model Development
8. Economic Vitality
Concept Plan

The Concept Plan implements the vision through the creation of a mixed-use urban community focused on a dramatic central park. Residential, employment, shopping, education, and recreation are integrated throughout a high-quality urban and natural environment. The Concept Plan calls for over 6,000 new medium- to high-density residential units, 3,000,000 square feet of office, 500,000 square feet of retail including shops, restaurants and entertainment, and over 170 acres of parks, greenways and protected natural areas.

The AmberGlen Community Plan Concept Map (Figure B) identifies key concepts integrating land use, open space, transportation, and urban design elements:

- **A mix of uses**
  Mix housing, retail, open space, and employment throughout the site and often within individual blocks, with the intention of creating lively, varied, and walkable urban environments.

- **Urban green landmark**
  Organize high-density residential and mixed-use blocks around the “central park” and natural resource areas.

- **Housing density and variety**
  Provide housing that is significantly denser than the average Washington County product. Taper height and density to provide a transition to adjacent established townhouses and multi-family residences.

- **Urban shopping and a “Community Activity Center”**
  Establish a shopping and community focus that will create a lively urban environment containing shops, restaurants, cultural and civil facilities, and other amenities.

- **A range of different districts**
  Design a community plan with a strong overall identity comprised of distinct neighborhoods and districts, each with their own unique places and character.

- **Strong urban form**
  Require high-quality design consistent with a distinctive design theme to strengthen community identity and sense of place.

- **Integrate existing development**
  Coordinate plan features with existing development to allow flexibility in development phasing without jeopardizing the vision.
Figure B: AmberGlen Community Plan Concept Map
CHAPTER I – PARKS AND OPEN SPACE

Existing Conditions

The AmberGlen plan area's character is derived from three creeks that traverse the gently rolling topography, mature groves of trees, and a private central park that allows expansive views of the hills, sky and distant mountains. Riparian corridors and forest areas connect the plan area to regional natural systems and support deer, owls and other wildlife within the city. Future enhancement of existing open space and natural areas present an important opportunity to improve ecological functions, provide access to nature and recreation, and establish a community identity.

Parks, Greenways and Trails

Existing and planned public and private parks, trails and other facilities are identified in Figure 1-1.

A private park located central to the AmberGlen Office Park campus features a developed pond and fountain, outdoor amphitheater, soccer field, pathways, lawns and mature trees. The park is currently included in 32 acres of dedicated open areas owned and maintained by AmberGlen LLC for use and enjoyment by AmberGlen Office Park tenants. Nearby residents and others attracted to the quiet beauty of the area regularly visit the park area. A small private playground is located in the southeast corner of the plan area along Edgewood Drive for use by the Heron Creek condominium community.

No public parks or connecting greenways are located within the plan area. However, the City of Hillsboro has developed a variety of parks, greenways and trails within a 5 to 10 minute walking distance (¼ to ½ mile). Evergreen Neighborhood Park, Magnolia Neighborhood Park, and Bronson Creek Nature Park (with private partners) serve mixed-use neighborhoods north of the plan area. Orchard Nature Park and disc golf course and the Rock Creek Trail Greenway located directly to the west of the plan area serve as community and regional facilities. The Beaverton Creek Greenway preserves natural resources to the south of the plan area. Planned regional trails along creek corridors include extensions to the Rock Creek Trail and development of the Bronson Creek Trail to connect to the Beaverton Creek Trail to the south.

In keeping with the established City of Hillsboro goal of providing each resident with a park within ½ mile and a community scale park within 2 miles, a new community park ranging in size from 12 to 30 acres has been identified for the Tanasbourne/AmberGlen area (Draft Parks and Trails Master Plan, City of Hillsboro, May 2009). Community parks provide both active and passive recreation opportunities that appeal to the entire community. Community park features may include a performance area or amphitheater, community gardens, natural areas, trails, water features, and other facilities with community draw. Special park areas may include urban plazas, unique gardens, concessions or vendor space. Commercial lease space for third place uses such as a restaurant, bookstore or coffee house may also be provided. The City has also identified the need for a signature indoor recreation center to meet the full range of health and wellness needs of the community.
Figure 1-1: Existing and Planned Parks & Facilities
CHAPTER I – PARKS AND OPEN SPACE

Natural Resources
Streams, slopes, flood plains (Comprehensive Plan Map designation), and Significant Natural Resources Overlay areas (Hillsboro Zoning Map designation) are identified in Figure 1-2.

The plan area is located in the Rock Creek drainage basin. Rock Creek is located off-site and flows south parallel to the west plan area boundary. The main hydrologic feature in the plan area is Bronson Creek which flows southwest through the central portion of the site, primarily on OHSU’s West Campus, to expansive wetland communities to the south. Bronson Creek is a tributary to Beaverton Creek, and Beaverton Creek joins Rock Creek approximately 1.25 miles southwest of the plan area. The site also contains two smaller streams: a tributary to Rock Creek traversing the northwest corner of the plan area and a tributary to Beaverton Creek located in the southeast corner of the plan area. Wetlands and natural resources were mapped in the plan area in the City of Hillsboro Goal 5 Natural Resources Inventory and Assessment in 2001. Rock Creek, Bronson Creek, and the Beaverton Creek tributary, and the Rock Creek tributary were identified and mapped as having locally significant stream associated wetlands and riparian corridors in the City’s natural resource inventory. Dominant native wetland vegetation within the significant natural resources includes Oregon ash, Pacific willow, red-osier dogwood and wild clustered rose. Fish resource information indicates an opportunity to improve the quality of habitat for fish identified upstream of plan area creeks. A mature Douglas fir stand located south of NW Wilkins Street is mapped as a locally significant upland wildlife habitat reserve. Additional native trees in mapped resource areas include grand fir, western red cedar, Oregon white oak and big-leaf maple. Native shrubs include vine maple, oceanspray, cascara, western flowering dogwood, Oregon grape, and salal. Sword fern is common in the understory. Observed wildlife includes owls, hawks and deer.

The City of Hillsboro has adopted a Significant Natural Resources Overlay (SNRO) District to provide protection for significant Goal 5 resources. Approximately 169 acres or 27% of the plan area has the SNRO designation. SNRO districts vary levels of protection and identify permitted and prohibited uses. There are three levels of SNRO protection. Development within the SNRO district requires a Significant Natural Resources Permit from the City of Hillsboro. Requirements include on-site delineation of resources present on the site and identification of proposed adverse impacts and any necessary mitigation. A Clean Water Services environmental review approving delineated vegetated corridors adjacent to streams and wetlands is also required.

Opportunities and Constraints
- There are opportunities within the plan area to improve ecological functions, provide access to nature, and strengthen the area’s identity by enhancing existing natural resources and park areas.
- Providing linkages to local and regional natural resources, parks, greenways and trail systems further enhances ecological and community benefits provided by existing parks and open space.
- A new community park is recommended for the Tanasbourne/AmberGlen area with active and passive features and special uses that hold appeal to the entire community.
- Slopes associated with creeks present challenges as well as opportunities to provide development over parking, ensure expansive views and to develop open space adjacent to natural areas to leverage amenity values.
Figure 1-2: Natural Resources
Parks and Open Space Concept

A guiding principle for the AmberGlen Community Plan is that it combines an intense urban development form with the natural environment. The Concept Plan organizes mixed-use urban development sites around a signature central park, natural corridors, habitat areas and developed open spaces. Pocket parks and connecting green streets and parkways knit open space into an “urban green” framework. This green framework provides recreation amenities, enhances ecological functions, and fosters a strong connection to nature in the heart of an urban neighborhood.

A key element of the Hillsboro 2020 Vision and a guiding principle for this plan is to promote the creation of “third places”. The Concept Plan identifies plazas and other locations where people will naturally gather. The central park provides a range of opportunities for public gatherings, both in intimate settings such as a sitting area next to a pond or within special gardens, or in an open meadow for larger group activities.

The green framework identified in the Concept Plan is critical to creating a landmark identity as envisioned for the community. In terms of economic vitality, a developed network of parks and open space provides an amenity level necessary for high-density development. Residents and employers are more likely to locate in a higher-density environment if a rich mix of amenities is close at hand. The central park and network of open spaces identified in the Concept Plan ensure places of compelling quality.

Green framework elements also link natural systems to further enhance ecological functions throughout the plan area. Greenway trail corridors, boulevards and streets will be designed to improve water quality, manage stormwater efficiently, support wildlife and showcase the natural beauty of the area. The parks and open space concept reflects a commitment to the ecological health of the area and recognizes that people’s physical and mental well being is related not only to the quality of the built environment, but also to having access to functioning natural systems.

Central Park and Forest Park Blocks beyond viewed looking south from above Cornell Road. Illustration credit: Sabrina Henkhaus, 2009.
Figure 1-3: AmberGlen Parks and Open Space Concept Map
CHAPTER I – PARKS AND OPEN SPACE

Green Framework Elements
Elements of the urban green framework are identified on the AmberGlen Parks and Open Space Concept Map (Figure 1-3) and discussed in the following sections.

Central Park
The central park is the major community amenity, organizing feature and focal point for the Concept Plan. The public park is designed to optimize pedestrian, bike and transit access. It will serve as the main area for recreation for local residents and employees and enables people who live or work nearby to walk to a major recreation facility. The central park also offers special programs and features that appeal to the broader community.

Park elements include natural landscaped areas, pathways, courtyards, water features and gardens in combination with active programmed uses. A multi-use pathway loops around the central park perimeter and connects to regional greenway trails along Rock Creek and Bronson Creek. Potential community uses include a signature indoor center focused on health and wellness programs potentially enhanced by partnerships with local health organizations such as Kaiser Permanente, Providence Health Care and Oregon Health Sciences University.

Unique park uses also strengthen the identity of the AmberGlen community. These may include urban plazas, sculpture or other special gardens, concessions or vendor space and even commercial lease space for third place uses such as cafes, bookstores or museums. A “festival street” is envisioned in the southern portion of the park to extend park uses while also providing local street connectivity. The design creates a street without curbs that can be closed to traffic for festivals, markets and other community events.

The character of the park incorporates features and materials that reflect the area’s natural and agriculture heritage reinterpreted for a modern urban context. Native trees and vegetation support urban wildlife. Materials and design features emphasize water, stone and reflect expansive views. The central park is configured as a long rectangle to maximize edges and proximity to residential development. It will form a dramatic foreground view for adjacent high rise residences and office buildings. The amenity value of the park is enhanced by ensuring residential views and emphasizing natural features.

A range of opportunities to enhance ecological functions and capture local efficiencies are addressed in the design of the park for stormwater management, water and habitat quality, energy production and local food production. The central park provides a “green” connection between the employment areas, the community activity center and planned residential development. It offers numerous opportunities for AmberGlen residents, employees and the broader Hillsboro community to come together in a place of exceptional beauty.

Forest Park Blocks
This linear public park features a protected stand of mature Douglas fir trees extending along the south side of NW Wilkins Street. The forest park blocks provide a significant east-west organizing feature dividing plan area districts, and a green connection to the central park, Rock Creek to the west and Bronson Creek to the east protecting wildlife habitat. Trails adjacent through towering fir trees and provide immediate access to a relatively pristine natural area within a highly urbanized community.
CHAPTER I – PARKS AND OPEN SPACE

Pocket Parks and Green Access Lanes
The Concept Plan identifies pocket parks within walking distance of all residential development. The exact location of these parks is not specifically dictated. These small, urban green spaces provide light and open space, and a place in every part of the neighborhood where people may enjoy nature. Some pocket parks may provide small play areas for children while others feature benches, landscaping and a water feature. Green access lanes provide pedestrian and bicycle access through a block and strengthen connectivity. They also provide opportunities for landscape areas and may be designed with green street features to manage stormwater runoff.

Green Streets and Boulevards
Local streets throughout the plan area will be assessed for their capacity to limit stormwater runoff and allow transpiration and infiltration through collection of runoff in parking strips, curbside planting areas, medians and other pervious areas. Low Impact Development Approaches (LIDAs) have been developed by Clean Water Services to replace conventional stormwater infrastructure (catch basins, pipes, and curbs) with vegetated swales, vegetated retention planters or basins, and pervious pavement that mimic an areas’ natural hydrology. Green streets enhance the experience of people walking and bicycling, support wildlife, cool ambient temperatures and provide views of nature from above.

Aesthetics and functionality combine to create multi-modal boulevards on arterials and on NW Wilkins Street. Signature streetscape treatment on NW Sticki Avenue features double rows of trees and landscaped medians, extending the iconic identity established by NW Evergreen Parkway to the north. The boulevards are envisioned to function in the conveyance, treatment and infiltration of stormwater where practicable. Landscaped medians and rows of trees buffer pedestrians and bicyclists from arterial traffic, intercept stormwater, reduce ambient heat, and provide beauty at the street level as well as when viewed from residences above.

Green Connectors
Green connector streets have been designed to provide off-street bicycle and pedestrian paths connecting the central park to greenway trails and natural areas. The green connector streets extend east, west and south to create a continuous green pathway network. Green connectors provide attractive, off-street routes for pedestrians and bicyclists and ensure safe, comfortable access to open space throughout the plan area. Tall conifers and native vegetation distinguish these greenway routes from other streets assist in wayfinding. Green connectors provide opportunities for stormwater management and habitat creation by mimicking the natural processes of a location. The design of green connectors and all stormwater management accomplished in the right-of-way and within public open space will be coordinated and informed by development of a Stormwater Master Plan to ensure water and habitat quality by treating stormwater prior to discharge into vegetated corridors.

Natural Corridors
Bronson Creek and two tributary streams comprise three riparian corridors traversing the plan area. The Concept Plan takes advantage of the attributes of these resources, preserving them from development while allowing passive recreation uses. The natural corridors consist of water quality sensitive areas (streams and wetlands) as well as associated upland vegetated corridors. They are an important natural conveyance of surface water and also provide habitat for wildlife. A continuous off-street pedestrian and bicycle network connects the central park and forest park blocks to the natural corridors and regional greenway trail systems. The trails skirt the edges of the vegetated corridors that protect wetlands and streams, allowing access for walking and wildlife viewing without adversely affecting ecological functions.
Goals and Policies

Goal 1  Design high-density urban development to fit within, complement and enhance the natural environment to create a landmark identity and to provide community and ecological benefits.

Policy 1.1 Organize development sites around the central park and protected natural resource areas.

Policy 1.2 Design parks and open space to create a landmark identity and to provide a significant, natural amenity for high-density urban development.

Policy 1.3 Enhance the local amenity value of parks and open space by maximizing residential views and ensuring distinctive, quality design highlighting natural features and beauty.

Goal 2  Provide a range of recreation opportunities for residents, employees and community members.

Policy 2.1 Provide a public community park compatible with plan area development to serve a range of ages and interests. Feature a variety of places, active and passive programs, and “third place” opportunities. Provide park uses for the local neighborhood including landscaped areas, pathways and trails, seating and picnic areas, playground uses, and open lawns. Consider special gardens and water features, urban plazas and promenades, concessions, and commercial lease space for “third place” uses that appeal to the broader community.

Policy 2.2 Provide a continuous off-street pedestrian and bicycle trail system within parks and adjacent to protected natural resource areas with connections to local and regional greenway trail systems.

Policy 2.3 Develop unified designs for off-street pedestrian and bicycle facilities to enhance wayfinding, ease of use, and plan area identity.

Policy 2.4 Ensure access to a public or private park within a short walking distance of approximately ¼ mile.

Policy 2.5 Pursue development of a signature indoor recreation center focused on health and wellness programs for the broader community.

Goal 3  Protect natural resources and enhance opportunities for people to be in contact with natural systems.

Policy 3.1 Provide opportunities for walking and wildlife viewing within protected natural resource areas, and for bicycles adjacent to protected natural resource areas. Avoid environmental impacts or if avoidance is not possible, minimize impacts to the greatest extent practicable.

Policy 3.2 Design parks, trails and streets to ensure stormwater runoff is treated prior to discharging to riparian corridors and natural resource areas.

Policy 3.3 Incorporate sustainable features, methods and materials in the development of parks and open space to enhance energy efficiency, environmental health and plan area identity.

Policy 3.4 Develop guidelines, regulations, or other incentives to preserve the existing mature tree canopy within the plan area thereby avoiding loss of environmental and visual amenity benefits.
CHAPTER I – PARKS AND OPEN SPACE

Actions

Action 1  Develop a strategy for acquiring land for key green framework elements including the central park, forest park blocks, and green connectors.

Action 2  Sponsor a competition for the design and programming of the central park and key green framework elements. The intent is to establish world-class urban and sustainable design, and to raise awareness of the plan area vision.

Action 3  Develop and adopt public area design standards consistent with the urban and sustainable design concepts established in Action 2. Elements addressed include gateways, treatments for landmark locations, plazas, transit stops, and streetscape elements.

Action 4  Complete a signature recreation center study to identify programs, building requirements, locations, costs, and funding sources. Explore potential partnerships with plan area healthcare stakeholders such as Kaiser Permanente, Providence Healthcare and Oregon Health Sciences University.

Action 5  Investigate the feasibility for local food distribution and community gardens in the plan area focusing on food quality, creation of gathering places and a shared civic identity, support for the local economy, and marketing to local restaurants.

Action 6  Identify parks and open space facilities, programs, costs and funding sources for inclusion in the City of Hillsboro Parks and Trails Master Plan.

Action 7  Based on the Stormwater Master Plan identified in Infrastructure Actions 32 and 33, identify opportunities to coordinate with Clean Water Services, private development and others to improve stormwater system efficiencies, water quality and to identify design features for public open space and right-of-way.

Action 8  Capture and reuse stormwater run-off from development in a public detention facility for use in irrigating parks and landscaped areas.

Action 9  Encourage the use of native and drought tolerant landscape material in public and private parks to reduce irrigation requirements, intercept rainfall, improve wildlife habitat and to enhance aesthetics and connections to nature.

Action 10  Require existing landscaping material and/or organic waste to be composted to the greatest extent practicable for reuse in new parks proposed within the plan area.

Action 11  Encourage the use of locally produced and available materials in the design and construction of park and open space areas to reduce transportation costs and support the local economy.

Action 12  Site and design park facilities to take advantage of solar exposure to reduce energy costs related to lighting and heating.
CHAPTER II – LAND USE

Existing Conditions

Current Comprehensive Plan and Zoning Ordinance designations were developed prior to the opening of the Westside Light Rail in 1998. The intent of the Station Community Plan Area (SCPA) designations was to support existing office and research campus development while also fostering a more transit-oriented, pedestrian-supportive environment. With the exception of recent residential development and the Work Force Training Center near the Willow Creek transit station, plan area development form has remained primarily auto-oriented and suburban office park in character. Approximately 3.4 million square feet is currently developed within the plan area, comprising 57% of the approximately 6.0 million square feet of development allowed under current zoning. For the remaining land controlled by Oregon Health Science University (OHSU) and AmberGlen Business Park stakeholders, a number of sites are underdeveloped and approximately 100 acres remain undeveloped.

AmberGlen Business Center

AmberGlen Business Center development began in 1991 in the plan area west of Bronson Creek. The multi-tenant, 217-acre campus master plan features 1.25 million square feet of research and office facilities, park areas and an attractive park and pond amenity. Several retail and service businesses lease NW Cornell Road frontage to the west. The Oregon Graduate Institute (OGI) campus has been integrated into the AmberGlen Business Center south of Walker Road. The OHSU Department of Science and Engineering Department took over the campus. The 270,000 square-foot facility was developed in the 1960’s to provide graduate-level training to support a burgeoning high-tech industry.

AmberGlen Business Center development generally features one- and three-story office structures with the exception of a pair of four-story signature office buildings that provide a distinctive gateway to the AmberGlen Business Center at NW Cornell Road. Surface parking, landscaped open space, and relatively low-scale, auto-oriented development characterize the office campus. The suburban development form does not fully support light rail transit ridership and access to the Quatama and Willow Creek transit stations located along the south boundary of the plan area. Planned for 1.25 million square feet of research and development facilities, the AmberGlen Business Center campus features several large, undeveloped parcels.

NW Cornell Road provides vehicular and transit access, and also presents a barrier to pedestrian access to retail uses to the north and east. Recent retail development adjacent to the plan area includes the Streets of Tanasbourne “lifestyle shopping center” and Tanasbourne Market Center. Restaurants and popular anchors retail such as REI and Whole Foods Market provide “urban amenity businesses” adjacent to the plan area that are especially important for higher density development. Kaiser Permanente’s future Westside Medical Center and corporate office development along NW Evergreen Parkway are located less than one-half mile north of the plan area.

OHSU West Campus

The Oregon Health Science University west campus occupies the eastern side of Bronson Creek and supports approximately 700 employees. In 1994, the Oregon National Primate Institute joined OHSU as an affiliate research institute. The Neurological Sciences Institute and the Vaccine Gene Therapy Institute are also located on the 260-acre research campus. State-of-the-art research facilities are buffered from adjacent uses by dense forests to the north, east and south and by Bronson Creek and vacant land to the west.
East Plan Area

The area between the OHSU West Campus and NW 185th Avenue is partially developed with office, retail and education uses near NW Walker Road. The school is a magnet high school for the Beaverton School District. Recent development near the Willow Creek transit center features medium-density housing and a new 100,000 square foot Work Force Training Center developed by Portland Community College (PCC) in partnership with TriMet.

School District Boundary

The plan area is served by the Beaverton School District. Schools that would serve the plan area have been over capacity and include McKinley Elementary located at 1500 SW 185th Avenue, Five Oaks Middle School located at 1600 NW 173rd Avenue and Westview High School located at 4200 NW 185th Avenue. The Beaverton School District boundary extends west to NW 206th Avenue with the Hillsboro School District serving development to the west. This condition results from the boundary along 185th Avenue shared by the City of Hillsboro and the City of Beaverton not corresponding with long-established school district boundaries.

Opportunities and Constraints

- Redevelopment of vacant and underdeveloped land with a more intensive mix of uses would leverage public investment in transit and address the City’s jobs-housing balance by increasing residents close to major employers.
- A relatively small number of property owners control land within the plan area.
- The opening of Kaiser Permanente’s Westside Medical Center in 2013 will bring people and jobs to the area, and will likely strengthen demand for housing and medical office space.
- Stakeholders require redevelopment timeline flexibility to ensure the viability of existing holdings while allowing redevelopment thresholds to be determined by the market.
- Cornell Road presents a barrier and discourages pedestrian access to the Streets of Tanasbourne and other area retail.
- The plan area is located in the Beaverton School District rather than the Hillsboro School District, even though it is entirely located within Hillsboro City Limits.
- Existing open space and natural features contribute to an attractive character. There is an opportunity to strengthen the area’s identity and vitality with a more intensive mix of uses and the creation of community gathering places.

View of AmberGlen Community Plan area looking north from above the MAX light rail transit line.
Land Use Concept

The Land Use Concept identifies intensive urban development close to major employers, the economically dynamic Tanasbourne Town Center, and major transportation facilities including the Westside Light Rail line and US Highway 26. Housing, retail, open space, education and employment are mixed throughout the plan area to create a variety of interesting, attractive urban places. The AmberGlen community is envisioned to be a model for transforming suburban development that allows residents to live close to work and have access to neighborhood businesses, recreation and nature within walking distance.

The Land Use Concept incorporates and expands the existing central park to provide a focal point and amenity for high-density residential development with a mix of employment and neighborhood-serving commercial uses. The Land Use Concept respects existing buildings and their individual redevelopment timelines while providing for new, higher density development on vacant parcels and redevelopment on underutilized sites.
Transit and Land Use
Regional light rail transit is planned to run through the plan area along the central park to NW 194th Terrace, connecting to Kaiser Permanente’s Westside Medical Center and employment centers to the west. A local transit circulator system within the combined Tanasbourne/AmberGlen areas provides convenient access between commercial, institutional, residential and recreational uses and strengthens connections to bus and regional transit.

Identity
The City of Hillsboro has a prominent civic presence throughout the plan area strengthened by the Hillsboro Parks & Recreation Department’s signature parks, trails, and programs. A potential library and indoor community center also serve to establish the community as part of the City. High quality streetscapes feature updated signature street lights, banners and other signs of civic care. The area’s history is celebrated in the names of streets and districts. The streetscape concept for NW Stucki Avenue creates a green boulevard that identifies the plan area with NW Evergreen Parkway and the Tanasbourne/AmberGlen regional-scale center.

Gathering Places
Ultimately, the plan area’s identity is established through community relationships. The Land Use Concept provides gathering places in parks, plazas and along streets at sidewalk-oriented, neighborhood-serving businesses. A community activity center is strategically located across from the north plaza at the central park at the crossroads of NW Walker Road and the NW 194th Avenue light rail transit street. Shops, neighborhood-serving businesses and a potential branch library activate the street with office and residential development located at upper levels. The center serves as the “heart” of the AmberGlen community and will be designed to strengthen community identity. It is also a destination at the north end of a street designated for active retail and commercial uses. An enhanced pedestrian route links the central park and community activity center across NW Cornell Road to the Streets of Tanasbourne to further support area vitality.

Sustainability
Plan area architecture is modern and humanistic featuring warm, natural materials, and reflecting high standards for sustainable design. Water is integrated throughout the design of the community in a number of ways. Stormwater is intercepted on roofs and in open space areas for reuse in irrigation and non-potable uses. Attractive landscaping is used in basins and swales to detain and filter runoff. Trails and green streets connect neighborhoods to the central park and forest park blocks, and to regional greenway trails adjacent to Bronson Creek and Rock Creek. A distinctive sense of place is further strengthened by featuring the area’s natural ecology, native vegetation and wildlife in the design of streets, stormwater facilities and open space.

Housing Affordability
The Concept Plan envisions residential opportunities for a broad range of households, ages and income levels. The Hillsboro Comprehensive Plan contains provisions intended to ensure that a full range of housing opportunities are available to residents throughout the City. A formal affordable housing program intended to assist working families and people on fixed incomes is currently under consideration. Three possible programs types being looked at: Program #1 would create a formal partnership with the Community Housing Fund, a nonprofit that currently receives $1 per capita annually from the City; Program #2 would create a grant fund to offset the cost of building permit and land use application fees for affordable housing; Program #3 would establish a 20-year property tax exemption for new mixed-use developments containing both affordable and market rate housing units.
CHAPTER II - LAND USE

Development Program
The plan's vision is implemented by the land use development types identified on the AmberGlen Community Plan Concept Map (Figure 2.1). Each development type represents a mix of land uses and varying levels of density and intensity achieved through thresholds and targets. Thresholds and targets provide a basis for estimating impacts from planned development. They will be tested and refined for adoption as regulatory standards as part of Community Plan implementation. The overall intensity of the community is such that most buildings require structured parking solutions. The standard plan area parcel size is approximately 1.5 acres though many parcels are larger. This configuration is an efficient development template for parking structures, yet it also maintains an urban-scale, walkable environment.

Table 2-1 identifies development capacity for the AmberGlen Community Plan at target densities identified in the development program. Land use mix allocations for the AmberGlen Community Plan Land Use Concept are provided in Table 2-2. Land use mix allocations provide targets for a given development type for the entire plan area, and may not reflect development for an individual property.

The development program fro the AmberGlen Land Use Concept indicates the following:

- A mixed-use urban community with residential uses comprising the greatest floor area. While the primary uses of residential, retail, and office are mixed in almost every district, residential areas predominate, and are dispersed throughout most of the plan area.

- The greatest areas of residential concentration are in the East and West Park Neighborhoods, where mid-rise and high-rise residences take full advantage of the project’s open-space centerpiece. With the addition of approximately 7,000 residential units, the AmberGlen Community Plan would rival the population of the Pearl District in downtown Portland.

- Retail is concentrated at the Community Activity Center and West Park Neighborhood, and is also permitted in limited amounts throughout the plan area. A concerted effort was made to target retail development at a level that could be supported by the market. Retail is strategically located to leverage critical amenity values throughout the plan area.

- Employment uses are primarily concentrated in the Employment District and OHSU West Campus, but are also present throughout the plan area, contributing to a lively, urban atmosphere. The Institutional development type includes the OHSU West Campus.

- The Institutional and Medium Density Transition development types are the only single-use districts.

Table 2-2: Land Use as Percentage Gross Floor Area

<table>
<thead>
<tr>
<th>Development Type</th>
<th>Res.</th>
<th>Office</th>
<th>Retail</th>
<th>Parking</th>
<th>Target FAR</th>
<th>Target du/ac</th>
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<tbody>
<tr>
<td>Medium Density Transition</td>
<td>0.85</td>
<td>0</td>
<td>0</td>
<td>0.15</td>
<td>1</td>
<td>34</td>
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<tr>
<td>Medium Density Urban</td>
<td>0.72</td>
<td>0.06</td>
<td>0.02</td>
<td>0.2</td>
<td>1.5</td>
<td>43</td>
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<tr>
<td>High Density Urban</td>
<td>0.62</td>
<td>0.16</td>
<td>0.02</td>
<td>0.2</td>
<td>3</td>
<td>74</td>
</tr>
<tr>
<td>Quatama Neighborhood Center</td>
<td>0.11</td>
<td>0.14</td>
<td>0.45</td>
<td>0.3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>185th Ave. Neighborhood Center</td>
<td>0.15</td>
<td>0.2</td>
<td>0.65</td>
<td>0</td>
<td>0.65</td>
<td>4</td>
</tr>
<tr>
<td>Community Activity Center</td>
<td>0.24</td>
<td>0.14</td>
<td>0.32</td>
<td>0.3</td>
<td>2</td>
<td>20</td>
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<tr>
<td>Employment Mixed Use</td>
<td>0</td>
<td>0.77</td>
<td>0.03</td>
<td>0.2</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Institutional</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.41</td>
<td>0</td>
<td>0</td>
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Table 2-1: Total Development Capacity Summary

<table>
<thead>
<tr>
<th>Developed Land Area</th>
<th>299 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks, Open Space, Protected Areas</td>
<td>174 acres</td>
</tr>
<tr>
<td>Residential Units</td>
<td>7,184 du’s</td>
</tr>
<tr>
<td>Net Residential Density</td>
<td>24 du’s/net acre</td>
</tr>
</tbody>
</table>

Land Uses by Floor Area:
- Residential 7,902,400 sq. ft.
- Employment (Office) 3,091,715 sq. ft.
- Retail 551,284 sq. ft.
- Institutional 1,375,189 sq. ft.
- Structured Parking 2,695,275 sq. ft.
- Total Gross Floor Area 15,615,863 sq. ft.
Figure 2-1: AmberGlen Community Plan Land Use Concept Map

Note: This map is presented in the Vision and Concept Plan Section as “Figure B”
CHAPTER II - LAND USE

Medium Density Urban
The Medium Density Urban (MDU) development type supports multi-family and attached residential development with density targeted for approximately 43 dwelling units per acre. Complementing uses such as office and retail are permitted with limits on size and location. The intended building form is urban in character with buildings constructed at or near the edge of the sidewalk with exterior walls that include architecture detail, generous window glazing, and common building entries. Appropriate building types include mid-rise condominiums and apartments, and urban-scaled townhomes. Vehicular parking may be planned with a combination of covered, structured, and/or surface parking.

Development Thresholds
- Minimum FAR: 1.00
- Target FAR: 1.50
- Minimum Height: 3 Stories
- Maximum Height: 6 Stories

Mixed Land Use Allocation Targets
- Residential: 72%
- Commercial Retail: 2%
- Office: 6%
- Structured Parking: 20%

High Density Urban
The High Density Urban (HDU) development type is composed of intensive, mixed use development with a residential emphasis. Density is targeted for approximately 74 dwelling units per acre. The district is intended to support and encourage office and retail commercial complementing uses. The building form is urban in character with mid-to high-rise structures built out to the street. Residential towers are oriented to retain views and for solar energy production. Exterior walls project strong architectural interest, generous window glazing, and common building entrances oriented to the street. Ground floor facades facilitate an active streetscape with retail, restaurant, and service-oriented office space. Vehicular parking is accommodated in covered and/or structured parking.

Development Thresholds
- Minimum FAR: 2.00
- Target FAR: 3.00
- Minimum Height: 3 Stories
- Maximum Height: none

Mixed Land Use Allocation Targets
- Residential: 62%
- Commercial Retail: 2%
- Office: 16%
- Structured Parking: 20%
Medium Density Transition
The Medium Density Transition (MDT) development type supports residential development that provides a transition from higher density areas within the plan area to existing and planned residential development at its periphery. This designation supports townhomes, condominiums and apartments, and other multi-family units. Target densities are approximately 34 dwelling units per acre. The intended building form may provide open space areas in the form of shared courtyards or porch areas. Vehicular parking would be primarily provided in private garages and structured parking lots.

Development Thresholds
Minimum FAR 0.65
Target FAR 1.00
Minimum Height 2 Stories
Maximum Height 4 to 5 Stories

Mixed Land Use Allocation Targets
Residential 85%
Structured Parking 15%
Retail Focus Overlay
The Retail Focus Overlay is not a development type but has been created to focus retail uses allowed in mixed use development types to specific locations. The Retail Focus Overlay requires ground-floor retail commercial development at specific locations to serve residential development throughout the plan area and to achieve an orchestrated retail strategy. Focusing smaller, urban amenity retail types common to urban residential districts at strategic locations complements and supports existing commercial retail development in the area.

Development Thresholds
- Commercial Retail is required at street level consistent with the retail allocation identified for the underlying zone for locations designated as Retail Focus Areas.
- Retail Focus Areas designated along select street frontages will require ground floor commercial retail uses.
- Additional commercial retail may be provided at locations not designated as Retail Focus Areas consistent with the retail allocation identified for the development type.

Community Activity Center
The Community Activity Center (CAC) is intended to provide an area of focused activity at a strategic location within the Community Plan area. The Community Activity Center is located at the northwest corner of the central park at the crossroads of NW Walker Road and a potential high capacity transit route along NW 194th Street. It is connected visually and physically by active street frontages and enhanced pedestrian routes to Cornell Road and to the Streets of Tanasbourne. The district is located between the central park and a tributary of the Rock Creek corridor where it is served by complementing urban, park and natural amenities. Shops and restaurants are featured at street level with office and residential development above. Civic, cultural and entertainment uses are encouraged to provide vitality and strengthen community identity.

The CAC is intended for development of mid- to high-rise buildings with residential densities targeted for approximately 20 dwelling units per acre. Street level facades facilitate active streetscape by providing retail, restaurant, and service-oriented office space. Civic, cultural and entertainment uses are encouraged in this district to strengthen community activity. Vehicular parking is accommodated in covered and/or structured parking.

<table>
<thead>
<tr>
<th>Development Thresholds</th>
<th>Mixed Land Use Allocation Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum FAR</td>
<td>Residential</td>
</tr>
<tr>
<td>1.50</td>
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</tr>
<tr>
<td>Target FAR</td>
<td>Retail/Civic</td>
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<tr>
<td>2.00</td>
<td>32%</td>
</tr>
<tr>
<td>Minimum Height</td>
<td>Office</td>
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<tr>
<td>3 Stories</td>
<td>14%</td>
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<td>Maximum Height</td>
<td>Structured Parking</td>
</tr>
<tr>
<td>none</td>
<td>30%</td>
</tr>
</tbody>
</table>
185th Avenue Neighborhood Center
The 185th Avenue Neighborhood Center is planned for mixed use development providing neighborhood-oriented retail and services. Residential and office uses are permitted as complementary, secondary uses. The neighborhood center follows a traditional town form characterized by multi-storied buildings with surface or podium parking provided behind building facades.

Development Thresholds
Minimum FAR 0.40
Target FAR 0.65
Minimum Height 2 Stories
Maximum Height 6 Stories

Mixed Land Use Allocation Targets
Residential 15%
Commercial Retail 65%
Office 20%
Structured Parking None

Quatama Neighborhood Center
The Quatama Neighborhood Center development type is intended primarily for neighborhood-serving retail development. Residential and office uses are permitted as complementary, secondary uses in this retail-focused design type. This neighborhood center follows a traditional town form characterized by multi-storied buildings along the street frontage with surface and structured parking provided behind building facades.

Development Thresholds
Minimum FAR 0.70
Target FAR 1.00
Minimum Height 2 Stories
Maximum Height 6 Stories

Mixed Land Use Allocation Targets
Residential 11%
Commercial Retail 45%
Office 14%
Structured Parking 30%
CHAPTER II - LAND USE

Employment Mixed Use
The Employment Mixed Use development type features office uses with supporting retail and commercial services businesses. This development type is consistent with existing multi-story office buildings within the AmberGlen Business Park, thereby providing market flexibility to allow existing office development to remain until the market presents opportunities to redevelop to a more intense, urban form. The Employment Mixed Use development type is characterized by mid-rise buildings. New development or redevelopment would be required to orient to the street frontage. Development is service by surface or structured parking.

**Development Thresholds**
- Minimum FAR 0.60
- Target FAR 1.00
- Minimum Height 2 Stories
- Maximum Height 8 stories

**Mixed Land Use Allocation Targets**
- Commercial Retail 3%
- Office 77%
- Structured Parking 20%

Institutional
The Institutional development type provides opportunities for education, research, health-related, and other institutional and employment uses. The area is characterized by minimum two-story buildings with surface or podium parking. This designation is intended to provide flexibility for existing institutional stakeholders including the OHSU West Campus and Oregon Graduate Institute.

OHSU West Campus facilities will continue to be developed according to the OHSU Master Plan emphasizing significant open space buffers and security provisions. The area is bordered by Bronson Creek on the west and mature stands of trees to the south and east, which serve to visually and spatially buffer sensitive research from adjacent uses.

**Development Thresholds:**
- Minimum FAR 0.40
- Target FAR* 0.41
- Minimum Height 2 Stories
- Maximum Height None

*Note: Minimum FAR and Target FAR is based on development approvals for the OHSU West Campus Master Plan.
Community Character

Active Retail Streets
Development is coordinated with streetscape elements to create the character of the public realm. Development on select streets in locations designated with the Retail Focus Overlay will be designed to foster activity and provide the character experience people seek in an urban environment. The section and plan below illustrates how proposed development will provide transitions in scale and between public and private realms to ensure livability with increased densities. The height of building cornices at the street establish a human scale with additional levels stepped back to admit light and provide views. They provide a sense of what the Community Activity Center, West Park shopping street, and other retail focus areas may be like.

The sense of urban community is enhanced by balconies and porches used by residents for urban gardens and outdoor rooms. Awnings protect pedestrians and allow light to pass through. Landscaped curb extensions break up curb lengths and allow for additional landscaping and the management of stormwater.
Residential Streets and Districts

The majority of the plan area will be characterized by residential development. Density is tapered down to the central park to maximize views and also at plan area edges to respect the scale of adjacent established neighborhoods. Buildings are stepped back in height from streets and access lanes provide access to light, air and nature. The transition between the sidewalk and actual residences provides an area for landscaping, porches, and stairs that adds to privacy yet provides transparency and allows people to feel comfortable and neighborly, even with higher densities. The section below illustrates Medium Density Transition development adjacent to Medium Density Urban development.
CHAPTER II - LAND USE

Park Streets
The East and West Park Neighborhoods border the eastern and western edges of the central park, and are the highest-density residential neighborhoods in the plan area. They will be densely developed with mid- and high-density residential blocks and towers staggered to maximize views and solar exposure. Restaurants are envisioned along park frontage. A high-capacity transit route is planned on the west side of the central park.

Although very densely developed, these neighborhoods are closely associated with green amenities including the central park, green streets, pocket parks, the Rock Creek Tributary, and Bronson Creek. In addition, green connectors will pass through the neighborhoods linking them to the central park and the Bronson Creek and Rock Creek Tributary natural corridors. The multi-use path running along the edge of the central park forms continuous loop and safe route for young and old alike.

Multi-use path loop around Central Park.
Green Boulevards
Major streets provide gateways and require strong design features to announce the plan area and orient people. The streets should also provide a wonderful experience for people whether they are biking, walking, strolling on the multi-use path or driving on plan area arterials. The multi-use path shown adjacent to NW Stucki Avenue provides access to the planned Bronson Creek regional trail.

Protected bicycle lane and sidewalk, Copenhagen. Photo courtesy of Bikeportland.org.

Boulevard treatment extends signature streetscape established at NW Evergreen Parkway.

Multi-use path provides access to the planned Bronson Creek Regional Trail.
Green Access Lanes

Green Access Lanes will be required to provide connectivity through longer development sites to ensure access to light, nature, and provide a park-like area at an intimate scale. They may also play a role in managing stormwater runoff and improving water quality.

Stormwater Management at access drive, South Waterfront, Portland, OR. Photo courtesy of Nevue-Ngan Associates.

Vancouver, B.C.
Third Places
One of the key elements of the Hillsboro 2020 Vision is to foster the creation of “third places”, those that are neither home nor work, but community gathering places. It also is a guiding principle for this plan.

Intense Mix of Uses
Encouraging a strong mix of uses in a structured, urban environment is a prerequisite for the creation of effective third places. The Community Activity Center and the West Park shopping street provide the most active and intense mix of uses in the plan area, creating energy needed to generate cafes, bars, restaurants, bookstores, and other businesses where people gather. The 185th Avenue Neighborhood Center and the Quatama Neighborhood Center offer similar opportunities on a smaller scale. The mixed-use approach identified in the Land Use Concept allows third place businesses to occur throughout the plan area.

Active Public Realm
The other key element to creating third places is providing outdoor spaces where this type of activity can readily occur. Wide sidewalks, especially adjacent to active uses, are critical. Plazas and other carefully sited urban, public spaces like pocket parks are important features. The central park provides significant opportunities for public gatherings, both in intimate settings such as a seating area next to a pond, or an open meadow for large public events.

Civic Uses
Approximately 3,000 new students are projected to be added to schools from AmberGlen development built out at targeted capacities. New schools may need to be accommodated within the plan area, preferably using an urban rather than a suburban footprint. Tentative sites have not been designated in the plan since the actual site could be in a number of different locations within the area.

A new library is not necessarily required for this area, however a library, community center and other similar facilities and services should be provided as part of a complete urban community. The Community Activity Center is a logical location for these types of facilities. Opportunities to redevelop an existing, quality building adjacent or within the central park for use as a community center, museum, or other public use should be explored.
Land Use
Goals, Policies and Actions

Goals and Policies

Goal 4: Create a vibrant, mixed-use urban community with a landmark identity.

Policy 4.1 Create a mix of residential, retail, employment, civic, and open space uses at urban densities.
Policy 4.2 Provide a variety of urban housing design types, densities and heights to serve a range of households, ages and income levels.
Policy 4.3 Organize development around a signature central park and open space framework amenity to ensure views and access to recreation and nature.
Policy 4.4 Focus and design retail uses to activate plan districts, leverage high density residential development, and complement and connect to existing retail centers.
Policy 4.5 Develop land use requirements based on development types representing a mix of land uses and varying levels of density and intensity to encourage a mix of uses within buildings, blocks and districts.
Policy 4.6 Provide “third places” or gathering places designed to foster social interaction and strengthen community relationships throughout the plan area.
Policy 4.7 Promote high quality design and strong urban form to create a compelling community identity.
Policy 4.8 Ensure a rich, varied urban environment by creating a range of neighborhood districts.
Policy 4.9 Provide flexibility when implementing land use concepts to support existing development until the time that redevelopment becomes economically viable.
Policy 4.10 Amend the Metro 2040 Growth concept to designate the combined Tanasbourne Town Center and AmberGlen Community Plan areas as a Metro 2040 Regional Center.
Policy 4.11 Reference the cultural and natural history of the plan area in design themes and in the naming of streets, districts and landmarks to strengthen a distinct and meaningful sense of place.

Goal 5: Create a model for environmentally sustainable community development.

Policy 5.1 Design development to encourage people to walk, bike and use transit.
Policy 5.2 Promote the use of building materials, construction and landscaping methods, and energy systems to enhance efficiencies and ecological functions.
Policy 5.3 Identify opportunities to integrate private development with public infrastructure and open space to maximize efficiencies related to stormwater management, irrigation, energy production, bio-waste, and local food production.
CHAPTER II – LAND USE

Actions

Action 13 Develop and recommend amendments to zoning and development standards to implement the development program identified in the AmberGlen Community Plan Land Use Concept.

Action 14 Develop and adopt design standards and guidelines for Districts and Neighborhoods identified in the AmberGlen Community Plan Land Use Concept. Coordinate with public area design standards project identified in Parks and Open Space Action 3.

Action 15 Develop sustainability standards, guidelines and incentives for public and private development. In the interim, require development to exceed the state’s minimum energy conservation requirements.

Action 16 Develop design concepts for the Community Activity Center, including a pedestrian connection through the Employment District to the Streets of Tanasbourne, to identify opportunities, constraints, and recommendations for access, parking and other key requirements.

Action 17 Identify potential public uses and partnerships that could serve as catalysts to leverage private investment.

Action 18 Collaborate with regional agencies to achieve the combined Tanasbourne Town Center and AmberGlen Community Plan areas as a Metro 2040 Growth Concept Regional Center with full multi-modal support.

Action 19 Conduct an analysis projecting price ranges and housing types that are likely to be built in accordance with the AmberGlen Community Plan Development Program. Include affordability estimates for both owner-occupied and renter-occupied housing.
CHAPTER III - TRANSPORTATION

Existing Conditions

Street Network
Primary access to the Plan Area is provided via US Highway 26 and arterials: NW 185th Avenue, W Baseline Road and NW Cornelius Pass Road. Adjacent streets providing direct access include NW Cornell and NW Walker Roads (north), NW 185th Avenue (east), and NW 205th and NW 206th Avenues (west). Access to Westside Light Rail transit (LRT) is provided by the Quatama and Willow Creek transit stations. The existing street network is identified on Figure 3-1. Functional classification, improvements, and jurisdictional authority for AmberGlen area streets are provided in Table 3-1.

Figure 3-1
EXISTING STREETS - AMBERGLEN PLAN AREA
Bicycle and Pedestrian Facilities
Recently improved arterials and collectors feature sidewalks and bicycle lanes. Relatively high traffic volumes and speeds make the environment somewhat adverse to bicycle use, especially at peak hours. The City of Hillsboro has identified “active transportation projects” within the plan area to promote and encourage bicycle, pedestrian and transit travel. The projects specify improvements to key routes connecting existing residential neighborhoods to the south to current and future employment areas located in the AmberGlen and Tanasbourne areas. These projects have been included in Metro’s Regional Transportation Plan.

Urban Character
Streetscapes generally convey an attractive, park-like character featuring rows of street trees combined with clusters of sizable deciduous and evergreen trees. A water quality swale is provided along NW 206th Avenue. Landscaped setback areas ranging from 28 feet to 60 feet adjacent to rights-of-way within the AmberGlen Business Park feature distinctive landscaping at intersections and at berms to visually buffer surface parking areas.

The existing transportation system is dominated by facilities designed for the automobile. Kittelson & Associates, Inc. has noted that the plan area is an “auto-oriented suburb with poor public infrastructure to promote walking, bicycling, or transit” (Transportation Existing Conditions Report, OHSU/AmberGlen Concept Plan, 2007). Though sidewalks and attractive landscaping are provided, commercial destinations and transit access are located outside the plan area and require people to cross wide, busy intersections and traverse along high speed arterials. Ample surface parking provides direct access to existing development and lack of connectivity contributes to high traffic speeds on NW AmberGlen Parkway and major streets. These factors serve to discourage walking, bicycling or transit use.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Functional Classification</th>
<th>Design Improvement</th>
<th>Jurisdiction</th>
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<tbody>
<tr>
<td>US 26 Sunset Hwy</td>
<td>Freeway</td>
<td>6 lanes</td>
<td>ODOT</td>
</tr>
<tr>
<td>NW 185th Avenue</td>
<td>Arterial</td>
<td>5/7 lanes</td>
<td>County</td>
</tr>
<tr>
<td>NW Cornell Road</td>
<td>Arterial</td>
<td>3/5 lanes</td>
<td>County</td>
</tr>
<tr>
<td>NW Evergreen Parkway</td>
<td>Arterial</td>
<td>5 lanes</td>
<td>County</td>
</tr>
<tr>
<td>NW Cornelius Pass Road</td>
<td>Arterial</td>
<td>5 lanes</td>
<td>County</td>
</tr>
<tr>
<td>NW Walker Road</td>
<td>Arterial</td>
<td>3/5 lanes</td>
<td>County</td>
</tr>
<tr>
<td>NW Stucki Avenue</td>
<td>Arterial/Collector</td>
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<td>City</td>
</tr>
<tr>
<td>NW 206th Avenue</td>
<td>Collector</td>
<td>3 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW AmberGlen Parkway</td>
<td>Collector</td>
<td>3/5 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW Amberwood Drive</td>
<td>Collector</td>
<td>3 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW Wilkins Street</td>
<td>Collector</td>
<td>2 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW 194th Terrace</td>
<td>Collector</td>
<td>2 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW Compton Drive north of AmberGlen Drive</td>
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<td>2 lanes</td>
<td>City</td>
</tr>
<tr>
<td>NW Compton Drive south of AmberGlen Drive</td>
<td>Local</td>
<td>2 lanes</td>
<td>Private</td>
</tr>
<tr>
<td>NW Von Neumann Drive west of AmberGlen Drive</td>
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<td>3 lanes</td>
<td>Public</td>
</tr>
<tr>
<td>NW Von Neumann Drive east of Compton Drive</td>
<td>Local</td>
<td>3 lanes</td>
<td>Public</td>
</tr>
<tr>
<td>NW Gibbs Street</td>
<td>Local</td>
<td>2/3 lanes</td>
<td>Private</td>
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<tr>
<td>NW Holly Street</td>
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<td>Private</td>
</tr>
<tr>
<td>SW Edgeway Drive</td>
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</tr>
<tr>
<td>NW Heritage Parkway</td>
<td>Local</td>
<td>2 lanes</td>
<td>City</td>
</tr>
</tbody>
</table>
CHAPTER III - TRANSPORTATION

Transit
Tri-Met bus service is provided by lines 52, 48 and 47. Bus line 52 runs along NW 185th Avenue connecting north to Portland Community College (PCC) Rock Creek and south to SW Farmington Road, continuing east to the Beaverton transit center. Line 52 headways average approximately 15 minutes between buses. Bus line 48 runs from the Willow Creek / SW 185th transit center, north to NW Cornell Road, continuing east along NW Cornell Road to Tuality Hospital in downtown Hillsboro. Line 48 headways between buses average approximately 35 minutes. Bus line 47 runs north along NW 185th Avenue from the Willow Creek transit center, continuing from NE Cornell Road to NW Evergreen Parkway west en route to Hillsboro transit center. Line 47 headways average approximately 40 minutes between buses. No service is currently provided within the plan area.

The Westside Light Rail Transit (LRT) line forms the southern boundary of the AmberGlen plan area with two stops and park and ride locations adjacent to the site. The Willow Creek / SW 185th transit center located at SW 185th Avenue near W Baseline Road includes a park and ride lot and bus service connections. The Quatama / NW 205th transit station features a park and ride lot. Much of the plan area is located beyond a convenient, ¼-mile walking distance from the light rail stations. Metro has identified a Red Line LRT extension through the plan area to Evergreen Parkway to serve employment centers in Tanasbourne and to the west as a “Next Phase Regional Priority Corridor” (level 2 tier) in the Regional High Capacity Transit Plan (Resolution 09-4052). The ranking notes that regional transit investment combined with local land use actions and investments will influence future capacity for housing and jobs at the regional level.

Mobility
Several key streets currently operate near or over capacity:
- US Highway 26 east of NW 185th Avenue,
- NW Walker, NW Cornell and W Baseline Roads near NW 185th Avenue;
- NW 185th Avenue intersections from W Baseline Road to US Highway 26;
- NW 185th Avenue in the vicinity of US Highway 26 to NW Evergreen Parkway;
  and
- NW 206th Avenue as a three-lane arterial south of the site.

There is consensus that additional connectivity is necessary in the area to enhance the transportation network and reduce congestion on existing collector and arterial connections in and around the plan area.
Opportunities and Constraints

- Access to existing development should be maintained and incorporated into the proposed street network to provide flexibility for future development and redevelopment.

- Existing street right-of-way is adequate to serve existing uses and designed to create an attractive park-like character. The streetscape is further enhanced by required, adjacent setback areas featuring mature street trees and tree clusters, landscaped berms, and accents at intersections.

- The existing transportation system is characterized by low connectivity, wide roadways, relatively high travel speeds and ample surface parking. In general the environment is dominated by facilities designed with the automobile as the priority mode, and serves to discourage widespread walking, bicycling and transit use for non-recreational trips.

- A high capacity transit corridor (LRT Red Line extension) has been identified through the AmberGlen plan area extending north through the Tanasbourne Town Center to NW Evergreen Parkway.

- With significant streets in the vicinity of the plan area currently approaching capacity, additional connections, intersection improvements and demand management strategies are necessary to reduce congestion and increase capacity on primary mobility streets in and around the plan area.

- There is an opportunity to incorporate improved “active transportation” facilities to promote walking, biking and transit use when planning for additional capacity within the plan area.

- Balancing peak hour travel patterns by increasing residential uses within the plan area could help mitigate additional future traffic impacts to adjacent arterials and interchanges.
Transportation Concept
A guiding principle for the AmberGlen Community Plan is that connectivity be provided to support walking, bicycling, and transit use while accommodating vehicles. The transportation concept enhances access within the plan area by incorporating existing streets into an urban grid system. The transportation concept is shown on the Transportation Concept Map (Figure 3-2).

Consistent with guiding principles for market flexibility and economic vitality, the proposed street network allows for flexibility and coordination in the transition from current land uses and existing development to an urban, mixed use community. The street pattern allows phasing over time to preserve viable commercial development while creating a complete and functional system. The street and pedestrian network is planned to provide a high level of connectivity to promote an active pedestrian environment and efficient development pattern. Typical block faces are approximately 225 feet to 400 feet long. Frequent bicycle, pedestrian and solar access will be ensured by access lanes through larger blocks.

Pedestrian comfort and convenience is a priority. In addition to safe, convenient access by foot, design concepts emphasize wider sidewalks, human-scale streetscape elements, special paving and reduced crosswalk lengths. Street designs will encourage active street life and enhance the pedestrian and the investment environment. Street trees, seasonal landscape, art, street furnishings and paving work together to create memorable streets and special places.

The transportation concept envisions a “green” network of vegetated landscaped stormwater facilities, pervious surfaces and landscape to reduce and improve the quality of stormwater runoff. Incorporating low impact development approaches (LIDAs) in the design of streets and green access lanes will provide a green landscaped environment that improves water quality and habitat and cools the air and water. At the same time, the streetscapes will be pleasing to pedestrians, provide access to nature and enhance the value of the area.

Enhanced transit under consideration includes the extension of a light rail transit through the plan area to serve industrial employment centers to the north and west. The transportation concept focuses on improving connections to the existing and planned LRT line, and encouraging more intense development within walking distance of a transit station in order to take full advantage of the regions light rail system. The planned LRT line extends from the Willow Creek transit center located at the southwest corner of the plan area and turns up through the plan area at the Bronson Creek crossing. The line travels up NW 194th Avenue crossing through the Community Activity Center heading north to the Streets of Tanasbourne and the Kaiser Permanente Westside Medical Center. A transit circulator facilitates quick connections to transit stations. The local circulator connects the plan area approximately as indicated on the Transportation Concept Map (Figure 3-2). Eventually, a street car, personal rapid transit system (PRT) or other local circulator could serve to focus area investment near transit corridors. PRT’s use an automated fleet of electric vehicles moving along a network of concrete channels.

In the intense, mixed-use environment envisioned for the plan area, a high proportion of trips people make are naturally by foot because the places people use in their daily lives (home, work, shopping, recreation, and transit stations) are close to one another. Convenient pedestrian system connectivity is emphasized to ensure that as many people as possible walk to their destinations. Continuous on- and off-street bicycle facilities and enhanced transit choices further increase the attractiveness of non-motorized transportation options. The Plan’s emphasis on residential uses serves to balance travel direction at peak hours. The approach serves to minimize impacts of significant increases in density and intensity on the arterial road system by internalizing trips and balancing peak hour demand.
Figure 3-2: Transportation Concept Map
Street Design
AmberGlen plan area streets and accessways will be developed to create a distinctive, high-quality environment, and to address multiple objectives for multi-modal balance and access, mobility, community identity and sustainability.

Street classifications identified in the Transportation Concept Map for the plan area and corresponding “street cross-section design standards” are provided in Section 13: Transportation and Section 21: Transportation System Plan (TSP) of the Hillsboro Comprehensive Plan. Classifications are based on traffic volumes and modal functions. Issues addressed by the standards include access spacing, right-of-way width, number of travel lanes, sidewalk width minimums and on-street parking to provide a basis for the development of specific street design requirements.

Street-design types have been developed for elements of the AmberGlen plan area street network. They are intended to provide additional design direction to address multi-modal mobility requirements, plan area identity, economic vitality and sustainability. AmberGlen street design types are consistent with functional classifications and features identified in the Comprehensive Plan. They provide a conceptual basis for developing regulations such as a detailed street plan and street design standards. AmberGlen street-design types are identified on the Streetscape Concept Map (Figure 3-3) and conceptual cross-sections are illustrated on pages 52 through 55.

Character
In addition to providing a high level of connectivity within the plan area, the street and pedestrian grid will be designed to create a distinct sense of place. Streetscape concepts have been developed to address specific functional requirements and also, to reinforce placemaking opportunities. The varied scale, function and character of AmberGlen streets help to define neighborhoods and orient people within the plan area. For example, NW Stucki Avenue is envisioned as a grand, curving boulevard designed to accommodate higher volumes of through traffic while also providing off-road pedestrian and bicycle paths. Distinctive rows of London Plane trees provide a visual reference to NW Evergreen Parkway and serve to strengthen the identity of the plan area as part of a larger Tanasbourne/AmberGlen regional-scale center. In contrast, “green connectors” are quiet, local streets recognizable by tall conifers, native vegetation, and water elements that link the central park to greenway trails and natural areas.

Green Streets
The Transportation Concept requires existing streets to be augmented by newly constructed streets to provide an urban grid. This presents a unique opportunity to establish grades and elevations to integrate a “green street” approach for much of the proposed road network. Preliminary soil studies, surveying and a Stormwater Master Plan should be completed to provide a basis for a comprehensive, district-wide approach to stormwater management.

Green street facilities enhance watershed health by helping to reduce impervious surfaces, replenish groundwater, and treat and filter stormwater at its source. Clean Water Services allows effective green facilities to support regulatory compliance. Green streets have the potential to reduce the cost of underground infrastructures. Green street facilities that may be appropriate for AmberGlen included vegetated curb extensions, vegetated infiltration basins and stormwater sidewalk planters. Even with somewhat impermeable soils, “flow through” stormwater facilities still provide watershed benefits by slowing and filtering stormwater.
Figure 3-3: Streetscape Concept Map
Street Design Types
Conceptual cross-sections for each street design-type are provided below:
CHAPTER III – TRANSPORTATION

Green Boulevard – Walker Arterial

Festival Street

Green Access Lane
CHAPTER III - TRANSPORTATION

Traffic Analysis


This section provides a condensed summary of the effects on trip generation resulting from land use changes identified in the AmberGlen Community Plan based on the transportation analysis completed to address Transportation Planning Rule (TPR). TPR compliance requires study of proposed changes to land uses to determine significant effects on the planned transportation system, adoption of measures to maintain system performance at levels consistent with those estimated under current zoning, and identification of likely sources for funding capacity improvements.

The analysis compares traffic impacts in the forecast year 2035 associated with development capacity under existing Comprehensive Plan designations with impacts from development capacity under proposed Comprehensive Plan amendments that reflect land uses identified in the AmberGlen Community Plan. AmberGlen Community Plan land use concepts change the existing emphasis on employment land uses to a high density mix of uses emphasizing housing with employment and retail. Planned land uses are identified in the AmberGlen Community Plan Land Use Concept Map (Figure 2-1) and Development Program provided on page 28.

Study Area

The study area for the transportation analysis extends beyond the AmberGlen boundaries, going as far west as NW Cornelius Pass Road, north across US Highway 26 to NW Rock Creek Boulevard, east to NW 173rd Avenue and south to W Baseline Road. The intent in establishing the project's transportation Study Area was to evaluate key intersections which may experience traffic demand increases of 10% or more due to the Proposed Comprehensive Plan Amendment. A total of 32 intersections were included in the AmberGlen transportation analysis.

A comparison of PM peak hour traffic impacts with and without the proposed plan amendments indicates that the influence area remains relatively unchanged.
CHAPTER III – TRANSPORTATION

Methodology
The source of the traffic demand estimates is the 2035 Regional Travel Demand model (VISUM software), supported by Metro, and utilized by Hillsboro and consultant staff for this analysis. The modeling analysis included a full-step process performed by Metro, in conjunction with oversight on land use assumptions and modeling parameters provided by Metro, Tri-Met, City of Hillsboro, County, and ODOT staffs. Mode choice, internal versus external trip patterns, directional (enter/exit) splits, and trip origins/destinations were estimated using this process. This modeling maintained the Metro model’s limited expansion in assumed transit service within the study area. As such, it could be construed by critics as a “vehicular-mode focused” analysis. This approach was used intentionally. In order to remain conservative, the analysis has principally focused on travel demand estimated without a significantly increased investment in transit. Had the analysis assumed a rigorous investment in transit while evaluating the TPR implications of the Proposed Comprehensive Plan Amendment, it would have created uncertainty as to the availability of capital funding to implement new transit system enhancements (Light Rail and buses), and uncertainty as to the revenue necessary to maintain ongoing transit operations and maintenance costs.

Performance Standards
Operational thresholds used for determining traffic deficiencies and required mitigation varies by jurisdiction. Washington County, City of Beaverton and City of Hillsboro have an intersection capacity threshold of 99 percent of capacity, which is represented by an overall intersection volume to capacity (v/c) ratio of 0.99. The Oregon Department of Transportation (ODOT) has a threshold of 85 percent of capacity, or a 0.85 v/c ratio for ODOT ramp terminal intersections. In certain cases ODOT may allow the v/c ratio to be as high as 0.90 if an Interchange Area Management Plan (IAMP) is undertaken and approved and a detailed analysis is completed to show the increased v/c ratio would not pose a safety concern on ODOT’s facilities.

Refine Regional Model and Roadway Network
City of Hillsboro staff reviewed the land use and roadway network coding in Metro’s 2005 and 2035 regional travel demand model and provided calibrations to better reflect City of Hillsboro and Washington County existing and future land use plans and Transportation System Plan (TSP) roadway network assumptions. The Transportation Analysis Zone (TAZ) land use coding was modified to better reflect planned land use patterns in key areas such as the Bethany area, West Bull Mountain, Helvetia/Evergreen area, South Hillsboro area, Downtown Hillsboro, and the AmberGlen/Tanasbourne area with Metro’s regional land use control totals maintained. The final model is referred to as the City of Hillsboro 2035 “Model Merge”. Prepared in cooperation with Washington County, ODOT, and Metro, it provides the best consolidation of all planning efforts in this portion of the Tualatin Valley, and allowed Metro to run a new 4-step model to reassess travel patterns and origin-destination trip tables.

The roadway network in and around the AmberGlen area was also calibrated to better reflect the existing and planned TSP roadway system. The existing 2035 Metro model network is based on the recently updated Federal financially constrained Regional Transportation Plan (RTP), which has been labeled R-1 in this analysis. The base network for this transportation analysis, R-2, contains all elements of R-1 plus forthcoming Hillsboro TSP amendments including these projects that are included in the in-process Metro State versions of the RTP. R-2 also includes a higher degree of network refinement including several neighborhood routes and collectors that are not represented on the original Metro model network (R-1).
CHAPTER III - TRANSPORTATION

Factoring Transit Investments
A transit-robust 4-step model run was conducted which evaluated an extensive array of enhanced transit investments in the Hillsboro area to determine whether identified roadway and intersection improvements could be avoided through investment in transit. This scenario included an extension of Light Rail into the AmberGlen/Tanasbourne area, an express bus on US-26, and frequent bus service on area arterial roadways. The conclusion was reached that enhanced transit service would increase overall mobility and reduce Vehicle Miles Traveled and System Delay, but it would not eliminate the need for intersection improvements necessary to meet City, County, and ODOT current operational performance standards.

Traffic Analysis
The Tanasbourne area has been experiencing excessive traffic congestion as development has moved toward full buildout under the Existing Comprehensive Plan. This has heightened local awareness that past Transportation System Plans were based upon only about 65% of buildout conditions. This analysis has committed to evaluating transportation system needs to meet buildout conditions, both under the Existing Comprehensive Plan and under the Proposed Comprehensive Plan Amendment. Employment and housing estimates for buildout under the Existing Comp. Plan have been based upon an inventory of what is already built, coupled with a review of previously approved Master Plans for properties within the AmberGlen/Tanasbourne boundary. These totals are shown in Table 3-2 on the following page. The proposed AmberGlen Community Plan and associated Comprehensive Plan amendments and future zone designations provide a better balance of jobs and housing than under the existing zoning, which is employment based with little allowance for housing. Table 3-2 shows how the resulting mixed-use zoning yields a better balance of uses within the planning area, and in total reduces employment by 4,941 jobs while boosting housing units by 6,729. The combination of these land use changes carries over to trip generation as it effects the direction of travel for generated afternoon peak hour traffic.

Trip Generation for the proposed AmberGlen zoning would also be more balanced than under the existing zoning. Table 3-3 on the following page shows how proposed zoning would generate 5,487 more trips during the PM peak two-hour period than under the existing zoning. However, 40 percent (2,034 trips) of the additional trips would be internal to the AmberGlen Community and would have minimal impact on the surrounding neighborhoods and adjacent regional arterials. The remainder of the traffic growth (3,453 trips) over the PM peak two-hours would be almost entirely trips returning to housing in AmberGlen, when compared against trips generated under buildout of the existing Comprehensive Plan. These housing based trips would generally be in an off-peak or non-critical direction in the surrounding AmberGlen/Tanasbourne area, which has a primarily employment and shopping/service based traffic pattern.

Converting the new AmberGlen PM peak two-hour trips into PM peak one-hour trips, and distributing the trips using the regional travel demand model, results in PM peak hour total entering volumes at each of the 32 study area intersection increasing by less than 8 percent. The peak movement volume increase for any intersection movement due to proposed AmberGlen Comprehensive Plan amendments would be 215 vehicles westbound at the intersection of NW 173rd Avenue and Nw Walker Road.
No external intersections would experience an increase in Total Entering Vehicles during the PM peak hour of more than 8%. In fact, only one intersection (NW 206th Avenue at NW Amberwood Drive) would experience an increase in excess of 5% (7.3% estimated). Of the 32 intersections studied, 14 would experience traffic volume increases estimated between 1% and 5%. Subsequent traffic operations analysis finds that only two intersections within the study area will require additional capacity improvements to mitigate traffic increases attributable to the proposed Comprehensive Plan amendments.

That said, most study area intersections were found to require capacity improvements simply to accommodate build out capacity under existing Comprehensive Plan designations.

Table 3-2: Summary of 2035 Housing and Employment

<table>
<thead>
<tr>
<th>Land Use at Full Build Out</th>
<th>Housing Units</th>
<th>Employees</th>
<th>Housing/Employees Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmberGlen Plan Area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>2,639</td>
<td>13,588</td>
<td>16%/84%</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>7,184</td>
<td>10,968</td>
<td>40%/60%</td>
</tr>
<tr>
<td>Delta</td>
<td>+4,454</td>
<td>-2,620</td>
<td></td>
</tr>
<tr>
<td>AmberGlen/Tanasbourne Area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>10,974</td>
<td>36,247</td>
<td>23%/77%</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>17,703</td>
<td>31,306</td>
<td>36%/64%</td>
</tr>
<tr>
<td>Delta</td>
<td>+6,729</td>
<td>-4,941</td>
<td></td>
</tr>
</tbody>
</table>

Table 3-3: Summary of 2035 PM Peak Two-Hour Vehicle Trip Generations

<table>
<thead>
<tr>
<th>Trip Generation at Full Build Out during PM Peak Two-Hours</th>
<th>Internal Trips</th>
<th>Leaving AmberGlen Area</th>
<th>Entering AmberGlen Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmberGlen Plan Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>3,599 (16%)</td>
<td>11,659 (51%)</td>
<td>7,809 (33%)</td>
<td>23,067 (100%)</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>5,633 (20%)</td>
<td>11,752 (41%)</td>
<td>11,169 (39%)</td>
<td>28,554 (100%)</td>
</tr>
<tr>
<td>Delta</td>
<td>+2,304 (42%)</td>
<td>+93 (2%)</td>
<td>+3,360 (56%)</td>
<td>+5,487 (100%)</td>
</tr>
</tbody>
</table>
CHAPTER III - TRANSPORTATION

Base Mitigation to meet Operational Standards
Existing Comprehensive Plan

It has been identified that 12 of the 32 study intersections would fail to perform within current roadway standards (V/C = 0.99). Additionally, 7 other intersections were found to perform between 95% and 99% of capacity. These results highlighted the need to identify some additional capacity improvements to ensure all 32 intersections would meet the threshold of 99% capacity. These improvements are referred to as the Base Mitigation. They are required to meet performance standards notwithstanding the Proposed Comprehensive Plan Amendment.

The analysis of existing Comprehensive Plan buildout traffic operations at the study area intersections established the need for significant additional mitigation improvements above those presently identified through the City of Hillsboro TSP and planned TSP spot amendments. These include:

- Widening NW 185th Avenue to provide an additional northbound lane from NW Evergreen Parkway to NW Bronson Road;
- Widening NW Walker Road to provide seven lanes of capacity from NW 185th Avenue through NW 173rd Avenue (or alternatively work with ODOT to adjust ramp meter rates);
- Widening of NW 173rd Avenue at NW Cornell Road to 5-lanes;
- Widening of NW 173rd Avenue at NW Walker Road to 5-lanes;
- Construct a third eastbound left-turn lane on NW Evergreen Parkway at NW 185th Avenue (or a fourth northbound through lane on NW 185th Avenue). Alternatively, consider one of the Alternative Road Network Scenario improvements to reduce traffic demand through the intersection; and
- Make capacity improvements at a total of 13 intersections.

The widening of NW Walker Road may not be needed in 2035 if the ramp meter rate at the NW 185th Avenue on-ramp to eastbound US-26 increases by 500 to 600 vehicles per hour (vph). The third eastbound left-turn lane on NW Evergreen Parkway at NW 185th Avenue (or fourth northbound through lane on NW 185th Avenue) would also not be needed if an additional crossing of US Highway 26 is constructed somewhere between NW 206th Avenue and NW 185th Avenue to provide another option for drivers to cross US Highway 26.

The existing double eastbound left-turn lanes on NW Evergreen Parkway at NW 185th Avenue would also benefit significantly from improved channelization on NW Evergreen Parkway and NW 185th Avenue to facilitate easier flow of traffic to the US Highway 26 eastbound on-ramp. This would occur through the extension of the existing northbound right-turn lane at the US Highway 26 eastbound on-ramp back to NW Evergreen Parkway and the re-striping of the existing northbound through lane at the westbound on-ramp to provide a shared through and right-turn lane, thereby providing two lanes of right-turn capacity on to the US Highway 26 eastbound on-ramp. These channalization improvements would significantly improve the efficient use of the existing eastbound left-turn capacity on NW Evergreen Road to northbound NW 185th Avenue.
Additional Mitigation to meet Operational Standards
Proposed Comprehensive Plan Amendments

The analysis of traffic operations at the study area intersections found the need for a limited amount of additional mitigation to supplement the R-2 Base Roadway Network in order to meet the 99% of capacity acceptance threshold. Specifically, capacity deficiencies were identified at two intersections where the following improvements were identified as needed to meet performance standards:

NW Walker Road at NW 173rd Avenue:
- Add a second northbound through lane; Add a southbound right turn lane.

NW 185th Avenue at NW Evergreen Parkway:
- Add either the third eastbound left turn lane or convert the existing northbound right turn lane into a through-right lane.

Evaluate the merits of Alternative Road Network Scenario improvements

Throughout the analysis, traffic demand volumes, intersection operational performance, and recommendations on required lane improvements to meet the appropriate jurisdictional operational standards were evaluated for a range of scenarios identified in Table 3-4 on the following page.

Of the alternatives studied, the most promising Alternative Road Network Scenario identified would be the crossing of US Highway 26 via NW 194th Avenue to NW Rock Creek Boulevard. The new crossing of US-26 would provide another option for drivers trying to cross US Highway 26 and provide access from NW Evergreen Parkway to eastbound US Highway 26 via the NW 194th crossing, NW Rock Creek Boulevard and the underutilized (in the PM peak hour) southbound NW 185th Avenue to eastbound US Highway 26 loop on-ramp. The additional accessibility provided by the NW 194th crossing of US Highway 26 eliminates the need for the third eastbound left turn lane on NW Evergreen Parkway at NW 185th Avenue (or a fourth northbound through lane on NW 185th Avenue). The NW 194th Avenue crossing would also provide local access across US Highway 26 to the proposed future alignment of the Red line LRT extension, while (based on travel demand model results) not attracting regional traffic to the local roadway system.

The NW 194th Avenue Overcrossing scenario would trigger the following mitigation needs above those identified for the Base Mitigation package of improvements:

NW Walker Road at NW 173rd Avenue:
- Add southbound right-turn lane; Add second northbound through lane

NW 185th Avenue at NW Evergreen Parkway:
- Add eastbound right-turn lane.

City staff is cognizant of the community’s expectation that transportation mobility solutions will be identified with or without proposed Comprehensive Plan amendments to include the AmberGlen Community Plan. The Alternative Road Network Scenarios seek to identify an array of alternatives which could be further pursued in a subsequent Interchange Area Management Plan (IAMP), which would be undertaken subsequent to adoption of the proposed Comprehensive Plan amendments.
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R-3 Scenario (Less Wilkins Extension):</strong></td>
<td>The evaluation of scenario R-3 (No future Wilkins Extension) was provided due to the expense of the new bridge crossing of Bronson Creek, and due to the uncertainty of its future timing in light of the implications on security at the OHSU Primate Center. It was determined that the Wilkins Extension is necessary to preclude exceeding capacity at W Baseline Road and NW 205th Avenue, and the need to construct 7 lanes on NW Walker Road at NW 185th Avenue (even if the ramp meter flow rate could be improved).</td>
</tr>
<tr>
<td><strong>R-4 Scenario (With 206th Crossing):</strong></td>
<td>This scenario tests a local overcrossing between NW Evergreen Parkway and NW Rock Creek Boulevard. It was found that this improvement would attract more than the 2% added traffic from the NW 185th Avenue interchange which resulted from the Proposed Comprehensive Plan Amendment. It was found to add a small amount of traffic through the Rock Creek neighborhood on NW Neakahnie Avenue. It also was found to attract more traffic away from the NW Cornelius Pass Road interchange than from the NW 185th Avenue interchange. This scenario appears to be worthy of further study in the IAMP process.</td>
</tr>
<tr>
<td><strong>R-5 Scenario (Less 173rd Overcrossing):</strong></td>
<td>The removal of this overcrossing from the future TSP roadway network would send approximately 500 additional vehicles onto NW 185th Avenue in the afternoon peak hour. This would require provision of another travel in the northbound direction (a fourth through lane). It was not found to significantly relieve the need for capacity improvements on NW 173rd Avenue from NW Cornell Road through NW Walker Road.</td>
</tr>
<tr>
<td><strong>R-6 Scenario (Braided Interchange Stucki to US-26):</strong></td>
<td>This concept would provide a direct connection from northbound NW Stucki Avenue onto US Highway 26 eastbound, and a direct offramp from US Highway 26 westbound to NW Stucki Avenue southbound. Modeling identified that it would attract such a significant amount of traffic from NW 185th Avenue and NW Cornelius Pass Road that it would cause NW Stucki Avenue to fail without widening to 7-lanes. ODOT expressed concerns as to whether this alternative would be able to be constructed given tight spacing of ramps. This scenario is not recommended for further study in the IAMP.</td>
</tr>
<tr>
<td><strong>R-7 Scenario (5-lane Stucki through the plan area):</strong></td>
<td>This scenario tested whether widening NW Stucki Avenue through the AmberGlen study area would attract sufficient traffic volumes from NW 185th Avenue that it could preclude the requirement for extending the 7-lane widening on NW 185th Avenue south to the NW Walker Road approach. It was found that it would not relieve any roadway improvements along NW 185th Avenue and is thus not recommended due to its cost and its negative implications as a barrier to a walkable AmberGlen district.</td>
</tr>
<tr>
<td><strong>R-8 Scenario (Split Diamond Interchange with Stucki and 185th):</strong></td>
<td>This scenario appears to have merit for further study in the IAMP process. As modeled, it would attract too much traffic away from particularly NW Cornelius Pass Road. Further refinement testing would look at reducing its capacity to identify whether it can benefit NW 185th Avenue sufficiently to justify its expense. It has the added benefit of providing direct access to the AmberGlen district.</td>
</tr>
<tr>
<td><strong>R-9 Scenario (5-lane 173rd Avenue Overcrossing of US-26):</strong></td>
<td>This scenario was found to attract too much traffic to NW 173rd Avenue, resulting in the need to widen NW 173rd Avenue from NW Parkview Boulevard south to beyond W Baseline Road. It was not found to relieve the need for other improvements identified on other roadways in the network and is thus not recommended for further study.</td>
</tr>
<tr>
<td><strong>R-10 Scenario (194th Overcrossing of US-26):</strong></td>
<td>This scenario appears to warrant further study in the IAMP process. It would provide relief to NW 185th Avenue well in excess of the 2% added traffic attributable to the AmberGlen Proposed Comp. Plan Amendment. Coupled with a potential future light rail extension into Tansasbourne on NW 194th Avenue, it would provide an attractive multi-modal access for the Rock Creek neighborhood to the transit station without using the NW 185th Avenue interchange. It would also provide an alternate route for traffic travelling between the Tansasbourne and Rock Creek districts without traveling through the NW 185th interchange. This would improve access for shopping and commute trips.</td>
</tr>
</tbody>
</table>
Conclusions and Next Steps

Transportation Planning Rule requirements can be feasibly met to accommodate the Proposed Comprehensive Plan Amendment for the AmberGlen planning area. Cost estimates for the two intersections requiring mitigation above that required under buildout under existing Comprehensive Plan designations are underway, but preliminary indications indicate that they are feasible when compared to revenue which would be generated by Transportation Development Tax collections from future development in AmberGlen.

Specific improvements identified to the intersection of NW Walker Road/NW 173rd Avenue and NW 185th Avenue/NW Evergreen Parkway should be conditioned upon AmberGlen plan amendment. Capacity improvements at NW 173rd Avenue and NW Walker Road would be complicated by the limited right-of-way available. It is noted that some or all of these may become unnecessary depending upon the results of the recommended Interchange Area Management Plan.

It is recommended that an Interchange Area Management Plan (IAMP) for the NW 185th Avenue interchange with US Highway 26 be completed by City of Hillsboro in conjunction with ODOT, City of Beaverton, and Washington County. The scope of the IAMP would need to consider the effect of increasing ramp dispersal rates on relieving traffic demand along NW Walker Road. The identified need to widen NW Walker Road to 7-lanes, as required regardless of the Proposed Comp. Plan Amendment, is inconsistent with regional and local objectives for that arterial. Consistent with the Regional Transportation Plan, the IAMP should evaluate the overall “Corridor” of US Highway 26 as it relates to the role of NW Walker Road and the implications of ramp meter rates.

It is further recommended that the IAMP provide further evaluation of various Alternative Road Network Scenarios recommended by this study for advancement. The IAMP would also need to address morning peak hour operations, and evaluate recommended acceptable performance standards and their implications on resulting infrastructure improvements.
Transportation
Goals, Policies and Actions

Goals and Policies

Goal 6: Support the development of a balanced, multimodal transportation system serving residents, employees, and visitors.

Policy 6.1 Improve access to and within the plan area and create a pedestrian-scale environment by incorporating an urban grid system comprised of streets and landscaped access lanes.

Policy 6.2 Design and prioritize transportation projects to serve existing development, stimulate new development and attract people to the area.

Policy 6.3 With regional partners, pursue the extension of High Capacity Transit (HCT) connecting the existing Westside Light Rail line to the plan area and to employment centers to the north and west.

Policy 6.4 Support a local transit circulator system within the combined AmberGlen plan area and the Tanasbourne Town Center to provide convenient access between commercial, institutional, recreational and residential uses, and to strengthen connections to light rail, HCT and bus transit.

Policy 6.5 Provide strong pedestrian and bicycle connections throughout the plan area, and to adjacent retail centers, health providers, employers, parks and natural areas, and transit. On key major streets, provide increased separation between vehicles and pedestrians and cyclists to encourage walking and biking as viable, alternative travel modes.

Policy 6.6 Ensure livability and access for neighborhoods adjacent to the AmberGlen plan area by maintaining mobility functions on major streets commensurate with travel demand created by plan area development, and by preventing encroachment of parking for plan area uses into adjacent neighborhoods.

Policy 6.7 Create and maintain an environment where there is less reliance on motor vehicle trips by coordinating public and private trip reduction strategies and pursuing a comprehensive travel demand management program.

Goal 7: Incorporate sustainable features, methods and materials into the design and construction of the transportation system.

Policy 7.1 Incorporate stormwater management functions into the design of streets, pathways and access lanes by providing green street features to reduce runoff, increase stormwater system efficiency, and reduce negative impacts of development on water quality and stream habitat.

Policy 7.2 Provide green street features to enhance the urban street environment, strengthen area identity, and effectively address stormwater management and water quality in light of infiltration potential. Green street features include, but are not limited to, use of pervious pavement, street trees, permeating curbs, vegetative filters, swales, and linear detention and infiltration basins.

Policy 7.3 Consider paving materials with a high Solar Reflectance Index (SRI) to minimize the amount of urban heat island effect generated by heat gain through impervious surfaces.

Policy 7.4 Reuse demolished roadway material as available for bedrock foundation of new streets in cases where there are no associated negative environmental impacts.
CHAPTER III – TRANSPORTATION

Actions

Action 20  Initiate and fund development of an Interchange Area Management Plan (IAMP) or equivalent public multi-jurisdictional process for the NW 185th Avenue interchange with US Highway 26 for adoption by the City of Hillsboro, Washington County, other local governments as appropriate, and the Oregon Department of Transportation (ODOT) to address, among other things, issues outlined in the AmberGlen Traffic Analysis and Summary and to identify improvements to the state and local street network needed to protect interchange and local street network functions based on adopted local land use plans. Ensure a transparent public process as identified by ODOT in the IAMP Guidelines.

Action 21  Amend the City’s Transportation System Plan to include street improvements and access management policies identified in the Interchange Area Management Plan or equivalent multi-jurisdictional process for the NW 185th Avenue interchange with US Highway 26 (Action 20), and functional classifications identified in the AmberGlen Transportation Concept. Coordinate with Washington County to ensure consistency with the Washington County Transportation Plan, and with Metro to ensure consistency with the Regional Transportation Plan.

Action 22  Develop a detailed street plan, design criteria and standard details for adoption in the Hillsboro Zoning Ordinance. Coordinate for consistency with the urban and sustainable design concepts established by Parks and Open Space Actions 2 and 3.

Action 23  Fully assess opportunities, constraints, costs and benefits associated with incorporating green street features in the design of streets, greenways, and green access lanes as part of the development of the comprehensive stormwater strategy identified in Infrastructure Actions 32 and 33.

Action 24  Based on Action 23 green streets feasibility findings, develop design standards for “green streets” and determine maintenance programs, and adopt “green street” standards into the City’s Transportation System Plan.

Action 25  Develop a strategy for acquiring land for critical rights-of-way identified in the AmberGlen Transportation Framework.

Action 26  Work closely with Tri-Met to develop new regional transit options and to enhance existing transit options within and adjacent to the plan area.

Action 27  Prepare a transit service strategy for the combined AmberGlen plan area and Tanasbourne Town Center that includes analysis of costs and benefits associated with a local transit circulator. Compare fixed-route systems such as a street car or personal rapid transit with a bus-based system.

Action 28  Study the potential for providing improved pedestrian access to connect the plan area to adjacent retail centers and employers to the north.

Action 29  Work with employers, transportation agencies, the Westside Transportation Alliance, and other transportation partners to develop a comprehensive travel demand management program.

Action 30  Develop a district parking strategy including parking requirements to foster non-auto trips. These may include development of a paid parking district, and standards that establish maximum parking rations and limits on surface parking spaces or area.
CHAPTER IV – INFRASTRUCTURE

CHAPTER IV – INFRASTRUCTURE

Existing Conditions

Water, sanitary sewer, stormwater, utilities and public safety services are currently provided to the AmberGlen plan area. The following summary is based on information provided by Clean Water Services (CWS) and the existing conditions analysis for the AmberGlen/OHSU Concept Plan completed in 2007.

Water

The Tualatin Valley Water District (TWVD) provides water to the plan area as illustrated in Figure 4-1. Existing public water lines north of the plan area include a 20-inch water main in NW Cornell Road and a 12-inch water line in NW Walker Road. To the east is an existing 16-inch water main in NW 185th Avenue. Some existing development has private water line loops, for fire suppression and irrigation, located on private property. These water lines have the capacity to serve additional development and growth but significantly higher future demands may warrant a system upgrade.

Sanitary Sewer

The AmberGlen plan area receives sanitary sewer service from both the City of Hillsboro and CWS as illustrated in Figure 4-2. The City of Hillsboro maintains sewer lines less than 24 inches in diameter. The local system under the City’s jurisdiction is mainly comprised of 8-inch diameter lines with some 12- and 15-inch lines. CWS is responsible for major facilities including large conveyance lines (trunk lines), pump stations, and wastewater treatment facilities that service the area. CWS operates a 27-inch trunk line which runs through the plan area from NW Walker Road southwest to the Westside Light Rail line. A 48-inch trunk line is located approximately 500 feet to the west of the site, and a 27-inch line is located approximately 150 feet east from the intersection of the Westside Light Rail tracks and NW 185th Avenue. All sanitary sewer lines in the plan area are gravity flow and convey sewage to the CWS’s Rock Creek Advanced Wastewater Treatment Facility.

Stormwater

The AmberGlen plan area is part of the Rock Creek Drainage Basin, which is part of the Tualatin River Watershed. The predominant soil type includes somewhat poorly draining soils. Additionally, the slope of the land toward riparian corridors generally drains the plan area. CWS manages water quality for the Tualatin River Watershed and establishes Design and Construction Standards (Standards) detailing requirements for design and construction of stormwater facilities. CWS’s Standards identify approvable Low Impact Development Approaches (LIDAs). LIDAs manage stormwater near the source, provide additional options for compliance with the Standards, and complement water quality facilities and vegetated corridors established as part of the Standards. LIDAs “reduce and mitigate the environmental impacts of conventional development by mimicking hydrology instead of replacing it with imperviousness” (Low Impact Development Approaches Handbook, CWS, July, 2009).

Existing stormwater facilities are concentrated in the northwest portion of the plan area and consist of stormwater piping, swales and other natural treatment systems as illustrated in Figure 4-3. Two prominent stormwater features include a tributary to Rock Creek and a large pond located in the green area between NW AmberGlen Parkway and NW Compton Drive. The creek is the terminus point for a portion of the stormwater piping and swales. Because it is very slow moving, the riparian area may provide additional water quality benefits. The pond located between NW AmberGlen Parkway and NW Compton Drive is privately-owned and intended to detain stormwater transported by site drainage through swales and water quality structures for use and re-use in landscape irrigation, thereby mitigating flows to Rock Creek for quality and quantity (AmberGlen Corporate Center Engineering Facilities Master plan, January 1992).
Private Utilities

NW Natural Gas provides the AmberGlen plan area with gas service and will continue to provide future infrastructure and service. Comcast provides digital phone, cable and broadband services. Existing lines are installed in SW 205th Avenue, NW 206th Avenue, NW Cornell Road, NW Walker Road, SW 185th Avenue, NW Von Neumann Drive, NW Amberbrook Drive, NW Bragg Drive, and several lines extending into the site from NW 185th Avenue. The only aerial routing of lines exists on NW Walker Road, SW 185th Avenue, and on NW 207th Avenue. Comcast will continue to provide infrastructure and service to all residential clients as development occurs. Future commercial and office infrastructure and services will be provided as requested. Verizon would continue to provide future telecom service within the plan area.

Public Safety

Fire Protection Services

The City of Hillsboro Fire Department provides fire and EMS service to properties within the city limits. The Fire Department has been challenged to meet target response times due to population increases absent commensurate increases in fire personnel. A new fire station is being developed west of the AmberGlen plan area at NW Cornelius Pass Road and NW Cherry Lane.

Police Services

The AmberGlen plan area is served by the City of Hillsboro Police Department from the NE Precinct located on NW Cornell Road in the business park east of NW Cornelius Pass Road (20795 NW Cornell Road). The NE precinct provides “full service” with officers, supervisors and equipment stationed at this location.

Opportunities and Constraints

- Existing infrastructure can be utilized and expanded as required to serve future development at a considerably lower cost compared to providing infrastructure and services to development located outside of the urbanized area.
- Increases in public safety services personnel and equipment would be required to serve a significantly larger population.
- Existing stormwater infrastructure and treatment will need to be expanded in conjunction with increased impervious area created by new development and an expanded street network.
- Comprehensive use of LIDAs for development of structures, streets and open space may reduce demand for piped stormwater infrastructure and associated costs by minimizing imperviousness and directing runoff from impervious to pervious areas.
- There is an opportunity to coordinate with CWS in the development of Stormwater Basin Master Plans to identify options for facilities located downstream of streets and development sites prior to stormwater discharge into a natural receiving water body such as Bronson Creek.
- The existing strategy of conveying site drainage through a series of ponds, swales and water quality structures and detaining is for use and re-use in landscape irrigation could be expanded to improve water quality and reuse water for non-potable uses by public and private development on a district-wide basis.
- There may be opportunities to create district energy systems based on a range of carbon-neutral power sources to enhance efficiencies and take advantage of economies of scale.
Figure 4-1: Water Map
Figure 4-2: Sanitary Sewer Map
Figure 4-3: Storm Sewer Map
Infrastructure Concept

All urban facilities and services will be provided to the AmberGlen plan area and sized to accommodate planned uses and densities. Existing facilities are incorporated to the extent practicable. Proposed system improvements and related cost estimates are based on impact analysis reports provided with the 2007 OHSU/AmberGlen Concept Plan. Subsequent refinements during development of the AmberGlen Community Plan have increased residential capacity by 2,344 dwelling units and reduced employment capacity by 1,227 employees. Proposed system improvements and order of magnitude cost estimates identified in this section remain instructive at a concept level. More detailed engineering plans and related cost estimates should be completed based on the refined development program and target densities identified in this Community Plan.

Water

TVWD will provide water to future development in the AmberGlen plan area. The existing 20-inch water main in NW Cornell Road and 12-inch water line in NW Walker Road illustrated in Figure 4-1 currently meet water demands for existing development but have little additional capacity. According to TVWD, a system upgrade could be avoided by tapping into the nearby existing 16-inch water main located in NW 185th and NW 206th Avenues and providing connections to the proposed water distribution system for individual properties.

Sewer

Sanitary sewer service will be provided by both the City of Hillsboro and CWS based on the existing system illustrated in Figure 4-2, with the City maintaining sewer lines less than 24 inches in diameter, and CWS responsible for operation and maintenance of the major conveyance system or trunk lines at least 24 inches in diameter, pump stations, and waste water treatment facilities. Service Level Agreements are in place between the City and CWS for maintenance of these facilities.

The local system would be gravity flow and typically comprised of 8-inch diameter sewer lines with additional 12-inch and possibly 15-inch lines connecting to the existing CWS 27-inch diameter sanitary sewer trunk line running roughly parallel to Bronson Creek. Based on preliminary calculations by CWS, proposed increases in density would exceed capacity of the existing 27-inch diameter trunk line and require upgrading to a 30-inch or 36-inch trunk line.

Per conversations with CWS, the 27-inch sewer line is subject to System Development Charges (SDC) funding where upgrades and associated costs are typically covered by district capital projects. However, the AmberGlen plan area would be responsible for portions of the cost if development required installation prior to agency plans to upgrade. Any new development upstream of the plan area would also share portions of the cost. According to CWS, it is not possible at this time to quantify how much the AmberGlen plan area would be required to contribute, but potential costs would be shared between CWS and future development. Cost factors that should be included as part of the OHSU/AmberGlen site development costs are the sewer line upgrade and any upgrades to the downstream treatment facility due to increases in flows.
CHAPTER IV - INFRASTRUCTURE

Water and Sewer Preliminary Cost Estimates

The following impact analysis and cost estimate for water and sewer service was prepared by Laurie Line, P.E., of PB Engineering for the OHSU/AmberGlen Concept Plan, 2007.

The estimated cost of water and sewer improvements is approximately $4.8 million. The cost estimate is an order of magnitude budget level cost: more detailed cost estimates should be completed once more detailed engineering plans are developed. Additional contingency should be included to cover the uncertainty in the overall scope of the project.

The cost estimate detailed below includes three basic improvements:

1. 27-inch sewer trunk line upgrade
2. Water main relocations for NW Walker Road, NW Stucki Avenue (extension), and NW 194th Street (extension)
3. Sewer main relocations for NW Walker Road, NW Stucki Avenue (extension), and NW 194th Street (extension)

The sewer trunk line upgrade cost estimate is based on projected pipe length/size and planning level unit costs associated with assumed installation work. Costs for water and sewer main relocations are based on measured length of the new roadway segment from planning level graphic. The cost estimate does not include onsite development sewer collection or water distribution systems.

<table>
<thead>
<tr>
<th>UNIT</th>
<th>ITEM</th>
<th>SIZE</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>TOTAL</th>
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<tr>
<td>LF</td>
<td>Sewer Trunk Line</td>
<td>36&quot;</td>
<td>5,350</td>
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<tr>
<td></td>
<td>Upgrade 27&quot; to 36&quot; (15 - 18 ft deep)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>40% Design &amp; Construction Mgmt</td>
<td>40%</td>
<td></td>
<td>$894,897</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LF</td>
<td>Relocate sewer main (Walker)</td>
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<td>150</td>
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<td>120</td>
<td>$126,000</td>
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<td>40% Design &amp; Construction Mgmt</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PROJECT TOTAL: $4,810,000</td>
</tr>
</tbody>
</table>

Table 4-1: Sewer and Water Cost Estimate
CHAPTER IV – INFRASTRUCTURE

Stormwater
The Concept Plan organizes high-density urban development within an “urban green” open space framework comprised of protected natural resource areas, parks, greenway trail corridors and green streets. Existing stormwater facilities will be utilized to the extent practicable. However, the proposed increase in development and streets and related increase in impervious area will require new facilities.

Clean Water Services (CWS) Standards
Design and construction of stormwater facilities come under the jurisdiction of CWS and are detailed in Clean Water Services Design and Construction Standards (Standards). Proposed development will need to meet the requirements of this document as it relates to both stormwater and sanitary sewer systems. The Standards include requirements to ensure downstream capacity, provide adequate conveyance during storm events, mitigate for stormwater quantity, and provide facilities to reduce contaminants.

Low Impact Development Approaches (LIDAs)
The Standards were amended in August, 2009 to update the LIDA section to reflect the unique physical characteristics and development processes of urban Washington County. LIDAs help to manage stormwater runoff near the source by putting stormwater back in the ground and reducing the volume of stormwater runoff that requires management. Approvable LIDAs reduce impervious area and include porous pavement, green roofs, infiltration planters, flow-through planters, vegetated swales and vegetated filter strips.

LIDAs are most effective when multiple LIDAs are used for a given development site. Given plan area soil characteristics, LIDAs may not be capable of infiltrating all of the stormwater for the area. CWS has noted that in such cases, LIDAs could be used to infiltrate runoff from smaller, more frequent storm events that are the largest contributors to erosion and degradation.

A detailed analysis and coordinated designs for green streets will be needed as a component of the AmberGlen Master Plan. The stormwater facilities plan and cost estimate provided in this section acknowledges the use of LIDAs in the design of a major green street boulevard but may not factor in potentially significant reductions to impervious area and related system requirements resulting from widespread use of LIDA’s for interior streets and site development.

Watershed Basin Planning and Regional Facilities
Ultimately, stormwater management must protect water quality of creeks and wetlands associated with plan area watershed basins. The AmberGlen plan area presents an opportunity to address stormwater management in a comprehensive manner to mitigate water quality and downstream water quantity impacts, protect natural resources, and protect development from flood damage through coordinated Watershed Basin Plans. According to CWS, the use of regional treatment facilities results in more uniform designs, simplifies maintenance, and consolidates the operations of a stormwater facility under a single owner. In such cases, stormwater from individual developments could be routed to a linear system of swales parallel to a natural drainage feature such as Bronson Creek. Swales would overflow into vegetated corridors or convey stormwater for detention by regional flow control facilities.

Detention and Re-use for Non-potable Uses
As previously noted, the existing pond and park feature is intended to mitigate flows to Rock Creek for water quality and quantity by detaining stormwater transported by site drainage through swales and water quality structures for use and re-use in landscape irrigation. Opportunities to treat and direct stormwater to detention facilities for use and re-use for irrigation and non-potable uses should be enhanced and expanded on an area basis.
Stormwater Facilities Preliminary Cost Estimate

The following impact analysis and cost estimate for stormwater facilities was prepared by Ronald Horres, P.E., of PB Engineering for the OHSU/AmberGlen Concept Plan, 2007.

The estimated cost of stormwater improvements is approximately $4.3 million. The cost estimate is an order of magnitude budget level cost: more detailed cost estimates should be completed once more detailed engineering plans are developed. Additional contingency should be included to cover the uncertainty in the overall scope of the project.

As detailed in Table 4-2, the cost estimate includes: site demolition, trench excavation, excavation material hauling, trench shoring, pipe, manholes, catch basins, bedding, backfill, site restoration, and a 25% contingency factor to account for miscellaneous construction items not covered in the costs, such as utility relocations. The estimate does not include: Green streets swale construction, construction costs for stormwater system(s) within individual development parcels, engineering, right-of-way acquisition, permitting, and owner administration costs. Costs are based on costs developed for the City of Portland in their Beech/Essex and Oak Basins Pre design Report, June 2004, prepared by CH2M Hill using Means 2002 Costing Manuals.

Methodology:
The proposed development plan (OHSU/AmberGlen Concept Plan, 2007) was reviewed and a preliminary stormwater collection plan was developed based on the parcel distribution and proposed road network presented in this plan. Estimates of peak runoff for a 25-year storm from each development parcel were made using the “rational method” (peak flow = rain intensity x area x runoff coefficient). Using these peak runoff values and the assumed stormwater collection plan, an estimate of the size and quantity of stormwater conveyance was made.

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<th>Pipe Diam (in)</th>
<th>Pipe Length (ft)</th>
<th>Av. Depth (ft)</th>
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<th>General Condition @10% ($/LF)</th>
<th>Waste Allowance @5% ($/LF)</th>
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<th>Total Direct Construct. Cost ($2002/LF)</th>
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<td>$71.74</td>
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TOTAL: $4,290,134
It should be noted that this estimate is intended to provide an order of magnitude number only, and significant additional design will be required as the development progresses before more accurate numbers can be determined. The estimate includes the following assumptions:

- There are no effects downstream of the AmberGlen plan area requiring new stormwater facilities outside of the plan area.
- The estimate includes piping installed in the right-of-way only. It does not include piping within each parcel or connections from the parcels to the right-of-way.
- Parcels located along either side of the proposed “green street” will pipe their stormwater directly to the stormwater swale included in the street system. Piping to the swale, or supplementary piping to augment the swale is not included.
- Parcels located directly adjacent to the existing stream corridors within the plan area are assumed to discharge directly to the stream.
- The stormwater system within the existing OHSU facilities is adequate and will not require additional stormwater piping.
- Assumes new piping is required in all areas (i.e. existing pipe is not considered). From this preliminary analysis it does appear, however, that existing piping along NW 185th Avenue to the east of the plan area may not be sufficient to meet the requirements of the adjacent parcels without on-site quantity reduction. Existing piping along NW 206th Avenue to the west of the plan area and existing piping in the north portion of the plan area may be sufficient to meet the requirements with perhaps only minor on-site quantity reduction.

With the incorporation of the proposed “green street” system within the interior portion of the plan area, it is recommended that additional natural quantity/quality stormwater treatment systems be incorporated both as part of the development right-of-way facilities and within the individual development parcels. These types of facilities lessen impacts on the existing stormwater/surface water system; improve the aesthetics of the development; and provide a focal selling point for the area.

Public Safety

Fire Protection Services

With a targeted increase of over 6,000 households and additional commercial development, the Hillsboro fire department will require additional resources to serve the plan area. As a general rule, a population increase of 12,000 people means that the demand for services would typically increase to 1,000 responses per year. Using this as an approximation of the demand for new services in the plan area, the increase in emergency responses would require additional staffing (approx. 21 personnel). In addition to staffing, specialized training and equipment (truck and rescue units) would be needed for new structures over 110 feet high.

Police Services

The NE Precinct on NW Cornell Road located in the business park east of NW Cornelius Pass Road (20795 NW Cornell Road) would continue to serve the plan area in the future. It is a “full service” precinct, with officers stationed out of that precinct, as well as supervisors and equipment. The projected increase in residents may require the NE Precinct to add personnel to provide the same level of service as it provides today.
Chapter IV - Infrastructure

District Energy Production

A guiding principle for the AmberGlen Community Plan is to serve as a model for urban sustainable development. The infrastructure concept proposes the creation of a neighborhood or district energy utility using renewable, carbon-neutral sources of power to deliver heating and cooling services. Incorporating clean, renewable energy sources such as solar and wind will be encouraged for AmberGlen plan area development on a project by project basis. District energy systems deliver heating and cooling services in the form of steam, hot water and chilled water through thermal piping networks to multiple buildings within a localized area. District energy systems serve the aggregated thermal loads of an entire neighborhood to achieve an economy of scale where it is feasible to utilize surplus heat and local or renewable resources. The district energy systems approach results in increase in energy efficiency by effective use of renewable resources.

According to the Environmental and Energy Study Institute (EESI), eighty-five downtown utilities and 330 campuses in the United States currently use district energy to reduce costs and greenhouse gas emissions, increase efficiency, and improve reliability. District energy enables flexibility with regard to fuel source once the distribution system is in place, and provides opportunities to use local renewable resources for thermal energy. Two-thirds of the fuel used to produce power in conventional power plants is wasted and released as heat exhaust. Capturing this waste heat and utilizing it through a combined heat and power system can improve this efficiency rate to 80 percent or higher. District energy systems often require large initial investments which are recouped in subsequent years through lower energy costs. (Source: EESI, 2009, http://www.eesi.org. EESI is a non-profit organization established in 1984 by members of Congress to provide timely information and develop innovative policy solutions.)

A range of potential models should be reviewed and evaluated for feasibility, costs and benefits in partnership with public, stakeholder and local corporate partners. An example in St. Paul, Minneapolis and two examples being developed in the northwest are summarized below:

District Energy St. Paul: Biomass-fueled Hot Water Heating

District Energy St. Paul is the country’s foremost example of municipal district heating. It was initiated in 1983 as a public/private partnership among the City of Saint Paul, State of Minnesota, U.S. Department of Energy and the downtown business community to investigate the viability of hot water district heating and provide customers with energy efficient heating and stable rates. District Energy St. Paul began offering district cooling service to downtown building owners ten years after the startup of the district heating system. Ten years later in 2003, District Energy St. Paul became a “green” energy service provider following construction of an affiliated combined heat and power plant fueled by clean, urban wood waste. The plant simultaneously produces about 65 megawatts of thermal energy for District Energy and 25 megawatts of electricity for Xcel Energy.

District Energy St. Paul currently heats more than 185 buildings and 300 single-family homes (31.1 million square feet) and cools more than 95 buildings (18.8 million square feet) in downtown Saint Paul and adjacent areas. Customers enjoy stable rates, unsurpassed reliability and energy efficient heating and cooling service. In the district energy field, District Energy St. Paul is considered the most successful in the United States in terms of using renewable energy sources and energy conservation.

Portland District Cooling Company: Brewery Blocks, Portland, Oregon

Portland District Cooling Company (PDCC), an affiliate of Marubeni Sustainable Energy, Inc., operates a high-efficiency district cooling system for downtown Portland serving the Brewery Blocks, a five-block development of retail, commercial and residential space. The system was built in 2001. Through a distribution piping network running underground and in the Brewery Blocks parking garage, PDCC offers on-demand chilled water for air conditioning and cooling. The system allows building owners and tenants to avoid the capital, energy, operating, and maintenance costs associated with owning and operating their own chilled water system. It also provides energy savings and net reductions in water and sewer usage and charges for its customers. In 2008, PDCC began its expansion of this distribution network to also serve other buildings outside of the Brewery Blocks in the surrounding Pearl District.


Olympic Village, Vancouver, B.C.: Recovered heat from sewage

Vancouver's 2010 Olympic Village features a unique heat recovery system from spent sewage developed as a district energy utility. Heat recovered from raw sewage is directed back into a community energy system to supply heat and hot water to the Olympic Village site and then to all Southeast False Creek development at full project build-out. The utility’s three main components are the thermal energy center, hot water distribution pipes looping the site to buildings and back to the energy center, and energy transfer stations located in each building’s basement used to draw in heat from closed loop hot water system. The system utilizes raw sewage upstream of the treatment facility, rather than recovering heat at distant sewage treatment facilities because recovering heat closer to the sewage source makes heat capture easier and increases efficiencies.

In the False Creek system, sewage flows by gravity pipes to a pumping station which lifts it into another main towards a treatment center. Raw sewage is screened to remove solids and pumped through a heat exchanger where heat is drawn from liquids. The solids go into a self-cleaning wet well, where they are rejoined with the spent liquid later and returned to the pump station. The sewage recovery system has the ability to generate about 2.7 megawatts of energy and will be supplemented by the energy center’s three natural gas fired boilers. The sewage recovery system will supply 70 percent of the energy needs for the False Creek neighborhood. Most of the district energy utility is located below grade underneath a bridge. Five flue stacks have been designed as a public art piece and extend into a sculpted hand with fingernails featuring LED panels that change color to reflect the amount of green energy being produced.

Source: City of Vancouver, B.C., 2009 http://vancouver.ca/olympicvillage/
Infrastructure
Goals, Policies and Actions

Goals and Policies

Goal 8  Ensure adequate capacity, quality, and efficient delivery of water, sanitary sewer, stormwater and public safety services to support planned development.

Policy 8.1  Reuse existing infrastructure facilities to the extent practicable.

Policy 8.2  Provide infrastructure in substantial conformance with the AmberGlen Community Plan Infrastructure Concept. Alternative improvements may be identified to support uses and densities identified in the AmberGlen Community Plan Development Program.

Policy 8.3  Investigate the feasibility of establishing a “zero net impact” objective for stormwater quantity and quality. City owned facilities should strive to meet the Clean Water Services Low Impact Design Guidelines for “zero net impact” stormwater quantity and quality.

Policy 8.4  Promote district-based strategies for heating and/or cooling based on carbon-neutral power sources to increase efficiencies, reduce costs and provide ecological benefits not available through conventional or site-by-site development approaches.

Policy 8.5  Identify opportunities to capture and reuse sewage, stormwater or other infrastructure discharge to provide heating, non-potable water, and other services to public and/or private development.

Policy 8.6  Feature innovative infrastructure improvements and district-based strategies in the planning and design of public and private catalyst projects to strengthen community identity and to serve as demonstration projects for future development.

Policy 8.7  Ensure that the Police Department and Fire Department have the equipment, staff and expertise required to provide a safe and healthy environment given the larger scale and density of planned development.
Actions

Action 31 Complete detailed engineering plans and cost estimates for infrastructure system improvements to support uses and densities identified in the AmberGlen Community Plan Development Program.

Action 32 Complete a comprehensive strategy for stormwater management based on development of a Stormwater Master Plan for the AmberGlen area and the use of Low Impact Development Approaches for sites, streets and where required, regional stormwater facilities. Work in partnership with Clean Water Services, Washington County, City of Hillsboro Parks and Recreation, Engineering and Planning Departments, property owners and other public and private partners.

Action 33 Complete a detailed analysis and coordinated designs for managing stormwater within streets and public open space based on the Stormwater Master Plan for the AmberGlen area identified in Action 32. Coordinate designs with the development and adoption of “green street” standards into the City’s Transportation System Plan identified in Transportation Actions 23 and 24.

Action 34 Address innovative and integrated infrastructure improvements in the City-sponsored competition for design and programming of the central park and key green framework elements identified in Parks and Open Space Action 2.

Action 35 Amend Hillsboro Public Facilities Maps as needed to incorporate infrastructure system improvements identified in Action 430.

Action 36 Identify staffing, training, equipment and other Police Department and Fire Department resources required to effectively serve the larger scale and density of planned development.

Action 37 Initiate a district energy strategy which would seek to evaluate, identify and begin to develop energy production for planned development.
CHAPTER V – ECONOMIC DEVELOPMENT

Existing Market Conditions

The AmberGlen Community Plan presents an ambitious vision to create a vibrant, mixed-use regional center located in a suburban context. Implementing the vision will require public and private partnerships and strategic investments in civic projects and infrastructure.

The AmberGlen plan area occupies a unique and desirable location a short distance from major employers including Intel, Epson, Maxim, Nike, Columbia Sportswear, Solarworld, and Genentech and many other employers within the “Silicon Forest”. The plan area is also directly adjacent to the Tanasbourne Town Center which is one of the region’s most successful 2040 Town Centers. The Streets of Tanasbourne, a highly successful retail center, and the future build-out of the Kaiser Permanente Westside Medical Center and The Standard Insurance, which is anticipated to continue building out its Tanasbourne campus, all continue to attract jobs to the immediate area.

Demographic characteristics of the area support further intensification of economic development because they reflect the types of households that will choose higher-density housing coupled with high-quality urban amenities. These characteristics include a high percentage of two-income households, well-educated work force, significant foreign-born populations, and high-tech employees. The demographic who works in Hillsboro and Washington County’s high-tech cluster desires the low-maintenance and walkable access to the amenities provided by a vital urban environment. AmberGlen residential offerings support a lifestyle choice that is not currently available in Washington County, but is desirable because it allows people to live close to where they work while enjoying urban level amenities. Capturing this demographic by providing a unique live and work environment increases the competitiveness of both the City of Hillsboro and Washington County to attract and retain business.

The time is right for the AmberGlen Community Plan to affect more intensive economic use of the AmberGlen plan area by taking advantage emerging market trends. Major market trends demonstrate that people are seeking more mixed-use centers where the physical boundaries between living, working and playing are deliberately blurred. These market trends are a result of increasing energy costs, higher demands of employee productivity which leads to blended time between work and play. These trends combined with the location of the AmberGlen plan area provide an excellent opportunity for a unique, synergistic, walkable plan that will be economically successful. The AmberGlen plan area has been the center of a significant amount of existing investment, and this investment will be the foundation for the next phase of economic investment in the AmberGlen plan area.

For high-rise residential development to be successful in Hillsboro, significant urban amenities will need to be provided to cover the increased design and construction costs associated with high-rise development. Premium amenities that will add value to the area include proximity to significant parks, convenient and desirable neighborhood shopping, and enhanced transit options. These amenities are expected within the planning horizon of the AmberGlen Community Plan.
Economic Approach

The successful implementation of the AmberGlen Community Plan will rely on a unique mix of assets within the plan area and on strategic phasing of public and private investments over the next twenty years. It is widely recognized that building compact mixed-use urban form can be complicated due to the construction premiums that are required for vertical construction. The AmberGlen Community Plan intends to leverage the significant private investment in the plan area and immediate surrounding area and combine it with public/private partnerships and financing to match the latent and future demand for urban development form in a suburban context. To catalyze development components of AmberGlen that can be realized in the near term, key public/private partnerships will need to be extended to achieve the multiple plan goals of a "Big First Phase" and "Economic Vitality".

Project Phasing

Both public decision makers and members of the AmberGlen Steering Committee have stressed the need to ensure proper development phasing to respond to market trends.

The AmberGlen Community Plan places greater emphasis on mid-rise residential and mixed-use development forms in earlier phases of the plan. In order to reduce the economic risk and maximize economic vitality, mid-rise residential, mixed-use buildings have been located adjacent to the Community Activity Center and central park in what is anticipated to be the first major phase of development. There are two objectives with initiating development in this manner. This development provides the first phase of a more immediately marketable product, but also will be of scale sufficient to support the initial public investments necessary to create the first "big phase" of the development called for by the plan. High-rise residential development and locations have been redirected within the plan to sites with existing improvements. This approach focuses development expectations to those areas that can be made readily developable in the short term. As mid-rise residential and mixed-use developments occur, existing structures situated in areas targeted for high-rise development will depreciate in value relative to increased property values. The combination of the improved land values, additional amenities provided to the area, and an expected decrease in relative value of the existing improvements will allow these areas to redevelop into dense, high-rise residential towers in later development phases.

This approach will require a strong public/private partnership in order to identify an equitable plan for funding necessary improvements, and ensuring the amenities necessary to add value to the plan area are included. Many of the capacity enhancement improvements will be provided as each property within the plan area develops. Catalyst projects represent a primary initial investment in the area to provide the necessary infrastructure and desired amenities that will guide the growth and development of the plan area. Additional projects integral to the development of the plan area are identified as “far term” projects.

This early development will assist in building the momentum and establishing the initial investment necessary to fund the public investments, as well as provide some of the internal transportation improvements. The investment could provide the opportunity to utilize tax-increment financing to assist with additional transportation improvements and right-of-way acquisition, and the development of the civic functions of the plan. The provision of public structured parking will also be a key phased improvement. Parking can be accommodated in surface lots as an interim way to control the costs of early high-rise development, with the ability to convert to structured parking over time.
The overall development concept hinges on the ability for the plan area to increase densities as the area redevelops over time, providing the critical mass that supports the addition of desirable amenities that will add value to the plan area such as a community park or enhancement of transit options. This phasing approach also allows for the slow conversion of existing office structures and respects their existing value, without leaving large undeveloped parcels.

**Economic Vitality**

City leaders and Steering Committee members agreed at initiation of the AmberGlen Community Plan in February 2009, to add economic vitality as one of the key guiding principles, because without economic feasibility it would be difficult to accomplish the vision for AmberGlen. Real Estate consultant, Johnson Reid, described the key components to maintain market feasibility as those that will include an emphasis on improving the AmberGlen plan area for commercial/retail/entertainment and employment. Portland's Pearl District has been cited as an example of providing the strong assortment of commercial amenities that are necessary to make high density residential successful. Proximity to primary employment has been measured to be secondary to commercial amenities in order of importance to create an economically vital place. Through the Johnson Reid analysis, the AmberGlen Community Plan has evolved to move the Community Activity Center, the heart of commercial, retail, and civic functions, to the south of NW Walker Road to place it in closer physical proximity to the proposed residential portions of the project.

**Urban Amenities**

Throughout the planning process there has been recognition by public decision makers and members of the Steering Committee that place making will need to include significant investment in quality urban amenities. Johnson Reid analysis for the pricing premium for parks and commercial/retail amenities uses the analogy of a three-legged stool, which include jobs, housing, and retail/commercial and public amenities. Johnson Reid analysis concludes that AmberGlen will need each of the legs of the stool to be successful and that there should not be an over reliance on any one leg to ensure economic success within the AmberGlen plan area. Key findings of the Johnson Reid report include:

- **Commercial Amenities** are so valuable to households, that having them within walking distance allows them to pay more for a high-density type home. A specialty grocer where specialty foods, deli, flowers, gifts, and café under one roof and within two blocks has been measured to achieve a nearly 18% price premium.

- **Park and Open Space Amenities** in close proximity to urban density residential forms can provide a residential development between a 10% to 15% price premium.
Public Financing
Successful implementation of the AmberGlen Community Plan includes the need to understand how to finance the capital cost of the proposed plan. The “toolbox” includes a list of financial tools that have been successfully used in Hillsboro and by other jurisdictions for developing mixed-use center and other major projects contemplated in the AmberGlen Community Plan. The list includes the following tools and methods:

- **Public / private partnerships**: Development agreements that could provide assurances for financing mechanisms that reduce initial risk, catalyze initial development phases, or maintain momentum.

- **Urban Renewal District**: The investigation of an urban renewal district to provide tax-increment (TIF) financing has been broadly supported by the City Council and the Steering Committee. An analysis for the potential viability was completed by Johnson Reid. The key findings found that there is the potential for significant TIF revenues to help pay for the investments in parks, transportation, and transit that are identified by the plan.

- **Local Improvement Districts (LIDs)**: LIDs are special taxing districts that can be created to pay for specific capital improvements that benefit the district in which they are created. Creation of LIDs are approved by the City Council.

- **Vertical Housing Program**: This State administered program was created to allow local jurisdictions to provide tax abatements for encouraging vertical mixed use development by providing up to a 10-year property tax abatement between 20 to 80 percent, depending on the intensity of the proposed development. The program provides flexibility for a local jurisdiction to apply the tax abatement to either designated areas or to a single project.

- **Special System Development Charges (SDC)**: The City currently collects SDCs as allowed by Oregon law for Parks, Transportation, Water, and Storm and Sanitary Sewers. An additional tool is to include a special SDC assessment for a plan area that may incur unique capital costs associated with development in that plan area.

- **General Obligation and Revenue Bonds**: Municipal Bonding is also in the toolbox, and may be appropriate for consideration as a mechanism to finance large scale community-supported projects. Typically, General Obligation Bonds area long term debt instruments backed by the “full faith and credit” of the City and are typically paid by a property tax assessment. Revenue Bonds receive their source of revenue for debt service from the project that was financed. For example, a parking garage could be financed by revenue bonds, and the bond is paid back by parking fees in the garage.

- **Grants**: The City has successfully received grants and will continue to pursue other Federal, State, METRO, and County grants as appropriate.
Catalyst Projects

- Design and development of the Community Activity Center
- Development of medium-density, mixed-used buildings
- The realignment and construction of NW Stucki Avenue from NW Cornell Road south of the Westside Light Rail line
- The realignment and construction of NW 194th Avenue from NW Cornell Road south to NW Stucki Avenue
- Realignment and construction of NW Walker Road from NW Stucki Avenue west to NW 206th Avenue
- Design and construction of a central park
- Design and construction of green connections to Rock Creek and along Bronson Creek
- Preliminary High Capacity Transit Alignment and Engineering Study

Mid and Far-Term Projects

The exact timing of these improvements will be dictated by the rate at which the plan area is developed. The mid and far-term projects identified are:

- Split Diamond Interchange at NW Stucki Avenue and NW 185th Avenue and US Highway 26
- Full build out of NW Stucki Avenue
- Extension of NW Wilkins Road from NW Stucki Avenue east to NW 185th Avenue
- Public Parking Structure(s)
- Riparian Corridor Improvements
Economic Development
Goals, Policies and Actions

Goals and Policies

Goal 9:  Support a vital and sustainable economy within the AmberGlen Community Plan area.

Policy 9.1 Pursue economic development strategies that build on the AmberGlen plan area’s unique mix of assets.

Policy 9.2 Develop flexible regulatory structures that combine a range of incentives and performance measures to achieve an economically vital district.

Policy 9.3 Provide mechanisms to support new development, redevelopment, and adaptive re-use of existing structures and sites.

Policy 9.4 Create a branding strategy that establishes and promotes the AmberGlen plan area as a distinct, desirable Hillsboro location.

Policy 9.5 Identify public/private partnerships that support financing of economically vital mixed-use development.

Goal 10: Identify and implement funding strategies to support creation of an economically vital, mixed-use district.

Policy 10.1 Pursue diverse funding strategies that include, but are not limited to: tax-increment financing (urban renewal), System Development Charges (SDCs), Local Improvement Districts (LIDs), Vertical Housing Tax Credits, General Obligation and Revenue Bonds, Grants, and other public and private funding sources.

Goal 11: Identify strategic public investments to leverage widespread and sustained private investment.

Policy 11.1 Accelerate development with strategic public investments consistent with the plan’s guiding principles.

Policy 11.2 Support the removal of regulatory barriers without jeopardizing the AmberGlen vision.

Policy 11.3 Enhance coordination between public and private partners to facilitate timely decision making.

Goal 12: Expand economic activity and the jobs base within the AmberGlen plan area through the recognition that quality of life issues are critical to successfully attracting and retaining professional and support jobs in a global marketplace.

Policy 12.1 Provide opportunities to retain and expand existing AmberGlen businesses.

Policy 12.2 Identify and recruit businesses that are complementary to existing “Silicon-Forest” business clusters.

Policy 12.3 Work with local, state, federal, and private trade organizations to identify and recruit businesses to the AmberGlen plan area.

Policy 12.4 Create a system of performance measures to support a healthy and efficient business climate and ensure that the AmberGlen Community Plan retains its economic vitality.
CHAPTER V – ECONOMIC DEVELOPMENT

Actions

Action 38 Conduct an urban renewal feasibility study and adopt a plan to support infrastructure and other investments necessary to create an urban-scale, mixed-use center.

Action 39 Complete a comprehensive public/private funding strategy to support the plan.

Action 40 Develop and use SDC incentives to implement the AmberGlen Community Plan.

Action 41 Identify potential TOD funding.

Action 42 Establish methods of financing the development and ongoing maintenance of public amenities such as parks, open spaces, community center, and other similar public amenities.

Action 43 Develop an implementation strategy and schedule for catalyst projects.

Action 44 Provide incentives for developers to provide targeted public and private amenities and services that add substantial value within the plan area.

Action 45 Encourage the creation of an AmberGlen business association to develop and implement private business marketing strategies.

Action 46 Identify potential market barriers and employ economic development strategies to ameliorate barriers.

Action 47 Develop a business recruitment strategy.

Action 48 Develop and implement a parking strategy that supports market driven parking solutions.
ORDINANCE NO. 5933

HCP 4-09: AMBERGLEN COMMUNITY PLAN

AN ORDINANCE AMENDING THE COMPREHENSIVE PLAN ORDINANCE NO. 2793 AS AMENDED, ADDING A NEW SECTION 28, AMBERGLEN COMMUNITY PLAN, TO ESTABLISH GOALS, POLICIES, AND ACTIONS; AND A NEW SECTION 29 TO INCORPORATE BY REFERENCE THE AMBERGLEN COMMUNITY PLAN IN ITS ENTIRETY; AND AMENDMENTS TO SECTION 2, URBANIZATION; SECTION 14, COMPREHENSIVE PLAN MAPS; SECTION 15, STATION COMMUNITY PLANNING AREA; AND SECTION 21, TRANSPORTATION SYSTEM PLAN.

WHEREAS, the City of Hillsboro has identified an opportunity to create a regional scale mixed-use center enlivened with high-quality pedestrian and environmental amenities taking advantage of the regional light-rail for the AmberGlen Plan Area; and

WHEREAS, the City initiated a planning process with local and regional partners to create a vibrant regional activity center, with a strong sustainable environment, that reflects proximity of high value jobs, housing, and transit; and

WHEREAS, the Planning Commission adopted Order No. 8016 initiating the proposed Comprehensive Plan amendments on August 26, 2009; and

WHEREAS, the Planning Commission held two (2) public hearings on November 12 and 23, 2009 to consider the AmberGlen Community Plan, received the staff report and public testimony; and

WHEREAS, at the conclusion of the public hearing, the Planning Commission adopted Order No. 8020 on November 23, 2009, recommending City Council approval of the subject Comprehensive Plan and Map amendments based on the testimony, the Record, and Exhibits A, B and C attached hereto; and

WHEREAS, the City Council considered the Planning Commission recommendation, received the staff report, and held its own public hearing on December 15, 2009 on the subject Comprehensive Plan and Map amendments pursuant to Comprehensive Plan Section (1) (III) (9) to receive additional public testimony.

WHEREAS, the City Council closed the public hearing and considered the Planning Commission recommendation, staff report, and additional testimony at their meeting on December 15, 2009, and hereby adopts the findings of the Planning Commission as their own in regard to this matter attached hereto as Exhibit B.

NOW, THEREFORE, THE CITY OF HILLSBORO ORDAINS AS FOLLOWS:
Section 1. Comprehensive Plan Ordinance No. 2793 is amended by adding a new section 28 AmberGlen Community Plan, establishing goals, policies and actions, as set forth in Exhibit A.

Section 2. Comprehensive Plan Ordinance No. 2793 is amended by adding a new section 29 AmberGlen Community Plan incorporating the AmberGlen Community Plan document in its entirety into the comprehensive plan, attached hereto as Exhibit C.

Section 3. Comprehensive Plan, Section 2, Urbanization is amended to make reference to the AmberGlen plan area as set forth in Exhibit A.

Section 4. Comprehensive Plan, Section 14, Comprehensive Plan Maps is amended to include a reference to the AmberGlen Community Plan Map as set forth in Exhibit A.

Section 5. Comprehensive Plan, Section 15, Station Community Plan Areas, Quatama SCPA Policies is amended as set forth in Exhibit A.

Section 6. Comprehensive Plan, Section 21, Transportation System Plan is amended as set forth in Exhibit A and to incorporate the AmberGlen Community Plan Traffic Analysis which identifies transportation system facilities and improvements to be incorporated into the Hillsboro Transportation System Plan; and

Section 7. Except as herein amended, Comprehensive Plan Ordinance No. 2793, as amended, shall remain in full force and effect.

Section 8. This ordinance shall be effective from and after 30 days following its passage and approval by the Mayor.

First approval of the Council on this 15th day of December 2009
Second approval and adoption by the Council on this 19th day of January 2010
Approved by the Mayor this 19th day of January 2010

Mayor

ATTEST: Della Werner
City Recorder
APPENDIX A:
OHSU/AmberGlen Concept Plan Report Summary, March 2007

APPENDIX B:
Public Involvement

APPENDIX C:
Summary of AmberGlen Traffic Analysis, David Evans & Associates, November 2009

APPENDIX D:
AmberGlen Community Retail Capacity Analysis
The vision: create a vibrant regional activity center enlivened with high-quality pedestrian and environmental amenities, taking advantage of the region’s light rail system.
City of Hillsboro
City Council
Tom Hughes, Mayor
Ed Dennis, Councilor
Nenice Andrews, Councilor
Aron Carlson, Councilor
Joe Keizur, Councilor
Doug Johnson, Councilor
Cynthia O’Donnell, Councilor

Planning Commission
John Coulter, President
Joe Gall
Ross Mathews
Katie Eyre
Charles Fleisher
Steve Callaway
Ray Lankford

Planning Staff
Wink Brooks, Planning Director
Karla Antonini, Urban Planner III
Doug Miller, Urban Planner II
Dan Rutzick, Urban Planner I
Don Odermott, Transportation Planning Engineer

OHSU/AmberGlen Project Committees
Steering Committee
Dan Dorsa OHSU
Lesley Hallick OHSU
Marilyn Lanier OHSU
Frank Parisi Parisi & Parisi, PC
Jay Fisher Principal Financial Group
Brian Pearce Unico
Tom Bard SKB
Bruce Fong Kaiser Permanente
Jay Kenton Oregon University System
Craig Ramey Regency Centers
Brad Farmer Parr Lumber
Trond Ingvaldsen The Standard/ Standard Insurance Company
Betsy Murphy The Streets of Tanasbourne
Neshia Cameron Resident, 206th area
Stephen Cook Small landowner
Marvin Lamacus Resident, Walker Road area
Ian Dees Resident, South of planning area
Charles Fleisher Planning Commissioner
Katie Eyre Planning Commissioner
Randy McEwen Portland Community College

Technical Advisory Committee
Kevin Smith Hillsboro Parks and Recreation
Ray Gibson Hillsboro Public Works
Ricky Icenogle Hillsboro Building Department
Lt. John Specht Hillsboro Police Department
John Riner Hillsboro Fire Department
Marah Danielson Oregon Dept. of Transportation
Jillian Detweiler Tri-Met
Jerry Green Beaverton School District
Jennifer Garland Beaverton School District
Gary Pippin Tualatin Valley Water District
Gregg Leion Washington County Planning
Carrie Pak Clean Water Services
Astrid Dragoy Clean Water Services
Tim O’Brien Metro
Miranda Batechell Metro
Craig Eyestone AT&T Broadband
Karen Frost Verizon
Ali Sadri Northwest Natural
Tom Bennett Senior Urban Designer
Kokila Lochan, Urban Designer
Emily Hull, Urban Designer
Jerry Goldberg, Senior Urban Designer/Architect

Consultants
PB PlaceMaking
Paul Morris, Principal Consultant
Brian Campbell, Project Manager
Kimi Iboxshi Sloop, Deputy Project Manager
Tom Bennett, Senior Urban Designer
Kokila Lochan, Urban Designer
Emily Hull, Urban Designer
Jerry Goldberg, Senior Urban Designer/Architect

Leland Consulting Group
Dave Leland, Principal Consultant
Chris Zahas, Principal
Brian Vanneman, Associate

Kittelson and Associates
Dan Seeman, Principal Planner
Chris Tiesler, Engineering Associate
Andrew Ooms, Transportation Analyst
Ron Failmezger, Senior Engineer

SWCA Fishman
Stacy Benjamin, Senior Wetland Ecologist
Christie Galen, Senior Ecologist

PB Engineering
Isabella Bejarano, Lead Civil Engineer
Laurie Line, Senior Civil Engineer
Ron Horres, Engineering Manager
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INTRODUCTION

The OHSU/AmberGlen Concept Plan proposes a new development paradigm for the Portland metropolitan area – an urban community in suburbia. The City of Hillsboro initiated the planning process by recognizing that the circumstances of this site made it the ideal suburban location for creating a high value, vibrant regional activity center. The series of documents which make up the Plan are gathered in this Concept Plan Report to provide easy access to all of the information developed as part of this first phase of the planning process, and provide a place for additional documents as future planning phases unfold for this site.

Section I is a Summary of the OHSU/AmberGlen Concept Plan. The Summary articulates and illustrates the primary concepts and principles embedded in the Plan. It also sets the context for the planning process, proposes a phasing scenario for the public infrastructure projects, and estimates Phase I construction costs.

Section II documents the public process elements. The Plan rests on the foundation of an intense series of interviews with both the Plan’s stakeholders and with others who could provide important, real world perspectives on the Concept Plan, including developers of similar projects, and regional and state officials. The stakeholder group interviews, meeting notes and other related information are gathered in this section.

Section III is a collection of the Existing Conditions reports for the site – transportation, sewer, water, storm drainage, natural resources, and public and private facilities and services.

Section IV documents the design process for developing what has evolved into the Concept Plan, including the design “charrette” with the stakeholders and the subsequent work of the planning team.

Section V is the Development Program for the Plan, which lays out in some detail the type and amount of anticipated development, and a phasing scenario for the Plan.

Section VI is a collection of the Plan’s impact reports - transportation, sewer, water, storm drainage, natural resources and public facilities and services.

Section VII discusses Implementation of the Plan. The Concept Plan is the product of the first phase of the full planning process which needs to be completed to enable the long term transformation of the OHSU/AmberGlen area to an urban place. This section discusses the next phase of planning work needed to implement the Plan.
The vision: create a vibrant regional activity center enlivened with high-quality pedestrian and environmental amenities, taking advantage of the region’s light rail system.
Located on Portland’s westside between downtown Portland and Oregon’s Silicon Forest, the OHSU/AmberGlen area provides a unique opportunity for taking traditional suburban development to the next level. Development of the OHSU/AmberGlen area as an urban community would connect the adjacent regional Tanasbourne Town Center to the region’s Westside Light Rail line and create a vibrant mixed-use regional center in the Portland suburbs. Served by a major freeway close to the region’s most intensive high-tech industrial cluster and adjacent to major retail and service industry employers, the OHSU/AmberGlen area is the ideal suburban location in which to consider intensive urban development.

The City of Hillsboro initiated the OHSU/AmberGlen Concept Plan recognizing the unique attributes of this location. The City considered this 582 acre planning area located on its eastern edge to be an excellent site for a new high quality urban-scale development in a suburban context. The factors contributing to Hillsboro’s decision to create an urban community plan for this site are the small number of property owners, large amounts of undeveloped and under-developed land, and proximity to the economically dynamic Tanasbourne Town Center, major employers and major transportation facilities. The City believes that the implementation of the OHSU/AmberGlen Concept Plan will provide an extraordinary opportunity for the City to use land more efficiently while creating mobility alternatives for its residents and employees and an opportunity for people to live close to employment.

The OHSU/AmberGlen planning area is located at the southern edge of the Tanasbourne Town Center area a mile south of the Sunset Highway, US 26. The planning area is bounded by 185th Avenue on the east, Cornell and Walker Roads on the north, 206th Avenue on the west, and the Westside light rail line on the south. The area is served by the Willow Creek and Quatama Light Rail Stations.

FIGURE 1. Location Map showing the OHSU/AmberGlen site

The Streets of Tanasbourne

The northern edge of the OHSU/AmberGlen site from the Streets of Tanasbourne
The City of Hillsboro is the 5th largest city in the state and is one of the fastest growing cities in the Portland metropolitan region. Hillsboro has built a reputation as one of the region’s most innovative cities by proactively seeking out and encouraging successful, complex, large scale, higher density suburban residential, industrial, and commercial developments, such as Orenco Station, Intel’s Ronler Acres campus, and the Tanasbourne Town Center. The City has become the epicenter of Oregon’s Silicon Forest with billions of dollars of high tech investment resulting in the employment of nearly 25,000 high tech workers. A large amount of industrial land remains undeveloped. The City is also the location of Oregon’s second busiest airport, accommodating corporate domestic and international flights.

The area surrounding the OHSU/AmberGlen site has been extensively developed within the last fifteen years. The Tanasbourne retail and office area along 185th Avenue, between US 26 and Cornell Road, is almost completely developed. Immediately north of the planning area are approximately 4,000 units of medium density housing, largely townhouses and apartments. North of Cornell Road is the new Streets of Tanasbourne retail center, the westside’s only “lifestyle center”, and part of over one million square feet of retail space in the Tanasbourne area. Two recently approved projects in Tanasbourne will complete development for a large majority of the remaining vacant acreage north of the planning area: the 800,000 square foot TheStandard office complex and the one million square foot Kaiser Westside Medical Center. The neighborhoods adjacent to the western, southern and eastern edges of the site consist of mainly low to medium density residential development. Approximately 2,000 dwelling units are located in the vicinity of the Willow Creek and Quatama Light Rail Stations.

The gently rolling topography of the plan area is bisected by the Bronson Creek corridor, essentially dividing the site into two distinct sub-areas. The dominant development features of the larger western part are the existing AmberGlen Business Center and the Oregon Graduate Institute (OGI) campus. The OHSU Research Campus, consisting of the Oregon National Primate Research Center, the Neurological Sciences Institute and the Vaccine Gene Therapy Institute, occupies the eastern side of Bronson Creek. Between this campus and 185th Avenue is a narrow strip of land partially developed with office, educational and retail uses near Walker Road, and medium density housing near the Willow Creek light rail station.

Primary access to the site is from 185th Avenue, Cornell Road, Stucki Avenue, Walker Road and 206th Avenue. Cornell, 185th and Stucki are major, five lane arterials, with the first two near or at capacity, especially at rush hour. 206th is a three lane collector street serving traffic originating south of the site. Handling through traffic, in addition to traffic added by new development on this site, will be a major challenge. The site is well served by water and sewer service, although a new sewer trunk line may be necessary to handle future high density development on this site.
To guide development of the Concept Plan the City formed a Steering Committee (SC), composed of property owners and other key stakeholders, and a Technical Advisory Committee (TAC), consisting primarily of public agency representatives. The planning process began in July, 2006 with an intensive series of confidential interviews to discuss the vision for the site with the project’s stakeholders. In addition to Steering Committee members, representatives from adjacent neighborhoods, City, County, Metro and state officials, and representatives from the development community were also interviewed. Public and private stakeholders were enthusiastic about the proposed vision. The interview process and committee composition are documented in Section II of the full Concept Plan Report.

Before creating land use alternatives consistent with the vision, the planning team analyzed existing conditions on the 582 acre site and its surroundings. The Existing Conditions Analyses are in Section III of the Plan Report.

In August the project team shifted its focus to the design process. A “charrette”, or design workshop, was held with representatives of the stakeholder groups, who developed four design alternatives for the planning area. The planning team synthesized the work of the participants to produce a list of Guiding Principles, which helped the team combine elements from the alternatives into a proposed concept plan. This proposed concept was presented to the project Steering Committee, Technical Advisory Committee, Hillsboro Planning Commission and City Council for feedback before further design work or analysis was undertaken. This process is documented in Section IV of the Plan Report.

In order to analyze the proposed concept and prepare for future planning work, a Development Program was produced. This document quantified the proposed concept plan by calculating numbers of residential units and square footage of employment uses for each block in the proposed plan area and provides more detail on the development types. This document along with background information are in Section V of the Plan Report.

Using the Development Program, the team prepared impact analyses of the proposed concept plan. These analyses are presented in Section VI of the Concept Plan Report.

Modifications were then made to the proposed concept plan to address concerns about the feasibility of certain aspects of the development and the potential impacts of the plan. Following meetings with the SC and TAC to discuss the modifications and impact analyses, the planning team produced the final Concept Plan (Figure 2).
FIGURE 2. Land Use Concept Plan
The vision expressed by the City of Hillsboro for the OHSU/AmberGlen area is to “create a vibrant regional activity center enlivened with high-quality pedestrian and environmental amenities, taking advantage of the region’s light rail system.” The Concept Plan implements the vision through the creation of a mixed-use urban community focused on a dramatic central park feature and integrating residential, employment, shopping, education, and recreation throughout a high quality urban and natural environment. The Plan calls for almost 5,000 new medium to high density residential units, 3 million square feet of office, 850,000 square feet of retail and hotel, conference and entertainment uses.

**Land Use Concept Plan**

The basic land use concept is to create a varied mix of uses in all parts of the plan area, using zoning based on development types rather than use restrictions. Design standards, intensity thresholds and minimum square footage requirements for each development type will be part of the implementation package. Structured parking is assumed in most development types, although some on-site surface parking will be needed initially, and perhaps permanently in some lower intensity parts of the plan area.

The primary characteristics of the nine Development Types are articulated below:

### Urban Activity Center

- Intense mix of major retail, medium to high density housing (including point towers), office, restaurants, hotel, entertainment, conference center, and civic gathering space.
- 3 to 25 story buildings
- Approx. FAR: 3.0
- Approx. use mix: 25% retail; 24% residential; 14% office; 7% hotel/conference; 30% structured parking

### Neighborhood Center 1

- Neighborhood serving retail with some office adjacent and/or above residential
- 1 to 6 story buildings
- Approx. FAR: 0.7
- Approx. use mix: 45% retail; 14% office; 11% residential; 30% structured parking

---

* FAR is Floor-Area Ratio - the ratio of the total constructed floor area to the site's square footage.
** Approximate use mix - the relative amount of each use (including structured parking) assumed by the Development Program to be constructed at build-out in each development type.
**Neighborhood Center 2**
- Neighborhood serving retail with adjacent residential or office
- 1 to 6 story buildings
- Approx. FAR: 0.45
- Approx. use mix: retail 65%; office 20%; residential 15%; surface parking

**High Density Urban**
- High density residential and office with some ground floor retail
- Average 10-12 story buildings; up to 25 story point tower
- Housing range could include townhouses to point towers, up to 250 units per acre
- Approx. FAR: 3.0
- Approx. use mix: 60% residential; 16% office; 4% retail; 20% structured parking

**Medium Density Urban**
- Medium density residential with some office and retail
- 3 – 6 story buildings
- Housing range could include townhouses to apartments/lofts, primarily between 50 and 100 units per acre
- Approx. FAR: 1.5
- Approx. use mix: 71% residential; 6% office; 3% retail; 20% structured parking

---

* FAR is Floor-Area Ratio - the ratio of the total constructed floor area to the site’s square footage.
** Approximate use mix - the relative amount of each use (including structured parking) assumed by the Development Program to be constructed at build-out in each development type.
The Plan Elements

Medium Density Transition

- Medium density residential with some office and retail
- Provides transition to adjacent neighborhoods
- 3 - 4 story buildings
- Housing range could include townhouses to low-rise apartments/lofts, between 20 and 50 units per acre
- Approx. FAR: 0.65
- Approx. use mix: 77% residential; 5% office; 3% retail; 15% structured parking

Employment/R&D/Office

- Primarily office/R&D with service retail
- 2 – 8 story buildings
- Urban or campus setting
- Approx. FAR: 1.0
- Approx. use mix: 77% office; 3% retail; 20% parking

OHSU Research Campus

- Existing and planned uses allowed in Master Plan
- Use mix: 100% office/R&D/lab.

Civic/Institutional

- Open space, recreation
- Public services (police, fire, etc.), schools, colleges/universities, civic/community
- Permitted anywhere

* FAR is Floor-Area Ratio - the ratio of the total constructed floor area to the site’s square footage.
** Approximate use mix - the relative amount of each use (including structured parking) assumed by the Development Program to be constructed at build-out in each development type.
FIGURE 3. Neighborhood Plan
Each part of the planning area will have its own unique character. The differentiating features of these neighborhoods are discussed in the following sections.

Urban Center
This square, 15 acre area directly south of The Streets of Tanasbourne retail center will be intensively developed as an urban activity center. There are several alternative scenarios for how this area could develop, depending largely on whether or not the two existing four story office buildings remain. The original plan assumed the entire area would be redeveloped in a nine block urban grid. If the existing buildings stay, new development could take advantage of the topography, placing parking under a deck spanning the site. Access would be provided from the new Walker, Stucki and 194th alignments, as well as from an elevated street crossing Cornell from the Streets of Tanasbourne at the deck level. In any scenario, an active pedestrian environment, including an urban plaza, will be a major feature. A full mix of uses is anticipated, including a conference center hotel and entertainment facilities, creating an active 18-hour street life.

East & West Park
These two neighborhoods form the sides of the central park, and will be the major residential neighborhoods for the plan area. They will be very densely developed, but closely associated with green amenities, including the park, green streets, pocket parks and Bronson Creek. Retail will line much of the park block frontage at the street level, and on some street corners serving other parts of these neighborhoods.

Station Areas
The Quatama light rail station is proposed to be moved to the east side
of 205th, north of the MAX line, to take full advantage of the opportunity to create a mixed-use neighborhood center immediately adjacent to the station in this corner of the plan area. The station area itself is proposed to be a full mix of retail, residential and office uses, transitioning to a medium density residential character moving away from the station.

At the Willow Creek station, the plan proposes a mix of development types which will allow a wide range of uses around the station, including a neighborhood retail center (serving the existing and new medium density housing in the area) and significant office and education facilities.

**Walker/185th**

The neighborhood center at this intersection will serve a broader area than the medium intensity area to its south and west, which will redevelop largely as housing. Over time, the character of the neighborhood center will evolve into a retail, office and housing development, although with somewhat less intensity than the station areas.

**OHSU Research Campus**

The OHSU property occupied by the Oregon National Primate Research Center, the Neurological Sciences Institute and the Vaccine Gene Therapy Institute will continue to develop according to its master plan, as a research and development center. The campus will remain separated from the surrounding, redeveloping areas to its east and west by large open space buffers.

**Amberwood Business Center**

This area has the opportunity to redevelop to a more intense, urban development form, though one still dominated by office and R&D uses, with retail serving the surrounding area.
One of the Guiding Principles for the Concept Plan is that it combines an intense urban development form with the natural environment. The primary features that activate the “urban green” principle are discussed in the sections below.

**Central Park Feature**

The central park is the major amenity and central organizing feature for the Concept Plan. It will be an active urban park space, but one that also includes passive elements such as lush landscaping and a large pond. It will form a dramatic foreground view for the adjacent high-rise apartments and office buildings. It will also serve as the main playground for residents of the area, enabling people who live nearby to walk to a major recreation facility in their neighborhood.

**Natural Corridors**

One major and two tributary stream corridors cross the site. The Concept Plan takes full advantage of these features, preserving them from development while also allowing them to be used for passive recreation. A trail system will skirt the edges of the wetlands and streams, allowing access for walking, biking and wildlife viewing, without adversely affecting ecological functions. Enhancement will occur as needed to mitigate any adverse impacts of development activities.
Pocket Parks

Without dictating placement, the Concept Plan provides for pocket parks scattered throughout the neighborhoods. These small, urban green spaces provide light and open space, and a place in every part of the neighborhood to sit and enjoy the outdoors. Some may have play equipment for children, while others may have benches, landscaping and a fountain.

Green Streets

Providing a “green street” as the primary frontage for the interior blocks of the West and East Park Neighborhoods and the Walker/185th Neighborhood adds an amenity that enhances not only the street’s storm drainage capacity but also the quality of the pedestrian environment and the view from the dwellings that front the street. These streets limit stormwater runoff and allow infiltration by collecting it in surface landscaping in either the parking strips or the median, or both, giving the street the feel of a park block.

Green Connectors

In order to link the various elements of the “green infrastructure” together, the Concept Plan provides four connectors between the creeks, parks and green streets. Three connect the central park feature to Bronson and Rock Creeks. All four connect with green streets. These features provide excellent alternative routes to the street system for pedestrians and bicyclists, and also serve as part of the storm drainage system for adjacent neighborhood streets.
One of the key elements of the Hillsboro 2020 Vision is to foster the creation of “third places”, those that are neither home nor work, but community gathering places. It also is a Guiding Principle for this plan, which has created a number of opportunities for third places to emerge, as outlined below.

**Intense Mix of Uses**

Encouraging a strong mix of uses in a structured, urban environment is a prerequisite for the creation of effective third places. The primary location where this occurs within the plan area is the Urban Center Neighborhood. It will provide the most active and intense mix of uses, creating the energy needed to generate those indoor places (cafes, bars, restaurants, entertainment venues, etc.) where people gather. The two transit station neighborhood centers also offer opportunities for this type of energy, as does the Walker/185th center to a lesser degree. And the opportunity for third places is always present where retail activity can spring up within residential neighborhoods, especially along the central park street frontage and strategic corners throughout the plan area.

**Active Public Realm**

The other key element to creating third places is providing outdoor spaces where this type of activity can readily occur. Wide sidewalks, especially adjacent to active uses, are critical. Plazas and other carefully sited urban, public spaces like pocket parks are very important features. The central park also provides opportunities for public gatherings, both in intimate settings such as a seating area next to a pond, or an open meadow for large public events.

The inter-relationship between the public realm and the private, the outdoor and indoor, is an important factor in the creation of third places. The synergy between the two is often the catalyst for creating interesting “people places”. The Plan creates that synergy by combining active outdoor spaces and buildings with a mix of uses in the same area. Design standards will need to be created to ensure that this intent is implemented through attention to the details of sidewalk treatment, building relationships to public spaces, and other important aspects of site development.
Determining how people move within, to and from the plan area is critical to the creation of a successful community. The Concept Plan maximizes the efficiency of each of the circulation systems serving the area’s residents, employees and businesses, while integrating them smoothly into the regional transportation network.

Circulation/Land Use Relationships

The most important part of the circulation system is the street network. It serves every property and land use. Although the automobile is anticipated to be the primary mode of transportation on the street network, it has been designed to facilitate the use of other modes - walking, biking, bus and streetcar. The primary issue for serving a high intensity area is finding the right balance among these modes to maximize efficient use of the streets.

Fortunately, in intense mixed-use areas a high proportion of the trips people make are naturally by foot, because the places people use in their daily lives (housing, work, shopping, recreation and entertainment) are close to one another. Convenient pedestrian system connectivity to buildings and pedestrian amenities are the most important aspect of ensuring that as many people as possible walk to their destinations. In an urban environment this means placing the fronts of buildings on the sidewalk. Design standards will be required to ensure a pedestrian friendly environment.

Transit

An efficient transit system, both within the street system and in separate rights-of-way, is critical to providing a viable alternative to the automobile for non-local trips. The Concept Plan focuses on building good connections to the existing MAX line, in order to take full advantage of the region’s light rail system. It does so by encouraging more intense development within walking distance of the two MAX stations, and by creation of a Transit Circulator, to facilitate quick connections between those stations and areas within the Concept Plan area that are beyond normal walking distance to the stations. In addition, Tri-Met’s bus system will need to be enhanced to serve other parts of this area as it intensifies over time.
Transit Circulator

The Circulator will connect the plan area with the Westside light rail line and other parts of the Tanasbourne Town Center. Initially, it is proposed to be a small electric bus system. Eventually, a streetcar is envisioned. It would circulate on three different routes, approximately as indicated in the Key Transportation Features diagram on page 15, linking activity areas, such as the Urban Center, East and West Park Neighborhoods and the new Kaiser Permanente Northwest Medical Center and the Tanasbourne office parks, directly to MAX.

Trails

As mentioned in the Urban/Green section, a system of off-street trails serving both pedestrian and bicycle traffic will be provided to link all parts of the plan area.

Traffic Analysis

Automobile traffic presents the future development of the Concept Plan with its biggest challenge: how to balance the mobility needs of residents and employees with the livability amenities of an intense mixed-use development. There are context and timing elements to this equation. The plan area is in a suburban setting that demands a certain "level of service" for its roadway systems, yet in order to create a successful urban community, suburban-scale streets are not appropriate here. Smaller streets, slower speeds and pedestrian amenities are critical in an urban setting. The phasing of street improvements may mean that certain areas have more auto congestion while residents and employees are adjusting to the new circulation alternatives that are available. People who are used to driving everywhere may take time to develop new walking, biking or transit habits as these alternatives become much more appealing in the new setting.

The Traffic Analysis (presented in Section VI of the full Plan Report) describes the scope of this issue, and points the way to the types of projects needed to serve both the plan area and the surrounding area. The Analysis also describes the scope and cost of these street projects. A key, longer term, off-site project, for instance, is the proposed “split diamond” interchange at the 185th/US 26 interchange, which would help handle freeway-bound traffic from this and surrounding areas.
All urban facilities and services will need to be provided to the Plan area, sized to accommodate the resident and visitor population.

**Sewer, Water & Storm Drainage**

Sewer, water and storm drainage systems will be incorporated into street rights-of-way. Additional sewer treatment capacity will also be needed, to accommodate development on this site and other areas served by the Bronson Creek interceptor line. Storm water reduction methods will be encouraged as part of the development process. Flow into adjacent creeks will first be directed through natural cleansing systems, either within street rights-of-way or the natural connectors, or on development sites.

**Fire & Police**

Fire protection will require, over time, a significant increase in staffing, new equipment and perhaps a new fire station to serve the area. Police services can be provided from their existing precinct office on Cornell Road, although staffing increases may be necessary to serve the increased population.

**Schools**

There is projected to be over 900 new students added to schools from this development at build-out. A new elementary school may need to be accommodated within the plan area, preferably using an urban rather than a suburban footprint. While a tentative site has been designated in the plan, the actual site could be in a number of different locations within the area.

**Library & Other Community Facilities and Services**

A new library is not necessarily required for this area, however a library, community center and other similar facilities and services should be included as part of a complete urban community. The urban center is a logical location for these types of facilities. It may also be desirable to reuse one of the existing, high quality buildings within the central park for a museum, gallery or theater.
Streets, parks, sewer, water and other public infrastructure improvements will be constructed in phases as the plan area develops over twenty years or more. However, one of the Guiding Principles is to start with a major development effort, which is reflected in the large number of significant projects in construction Phase 1 outlined below. Detailed cost estimates and phasing plans for these improvements and off-street site improvements will be developed in the Implementation phase. Preliminary cost estimates for the primary infrastructure projects provided by the public can be found in Section VI of the full Concept Plan Report, and are summarized below.

**Phase 1:**
- Right-of-way infrastructure (streets, sewer, water, storm drainage) for the re-alignments and extensions of: Stucki Avenue and 194th, including traffic circles 1, 2 and 3; the 205th extension from the MAX line to traffic circle 3; the realignment of Walker to Amberwood Dr.; and the realignment of Wilkins with traffic circle 3. Stucki Avenue along the east park frontage is assumed to be constructed as 3 lanes in Phase 1.
- Approximate costs:
  - ROW acquisition: $4.2 million
  - Streets: $14.2 million
  - Water & Sewer: $1.7 million
  - Storm drainage: $3.2 million
- Fully developed central park feature, including new street through the park.
  - Acquisition: $40 million (including existing buildings)
  - Street: $750,000
  - Park Improvements: dependent on design features
- Public parking structures needed to serve certain development areas: dependent on identified need
- Moving Quatama Station: $2 million

**Future phase(s):**
- Additional 2 lanes and center median parkway street improvement for Stucki Avenue along the east park frontage.
- Green Connector improvements for West and East Park Neighborhoods, Walker/185th Neighborhood and Quatama Neighborhood, including drainage, landscaping and trails.
- Bronson Creek and natural corridor improvements, including trails and other recreational or environmental improvements.
- Additional amenities for the central park, such as a museum.
- Split diamond interchange at Stucki/185th and Sunset Hwy, and other required off-site street improvements.
- Additional public parking structures
The Concept Plan is the culmination of the first phase of the planning process for the OHSU/AmberGlen site. A significant amount of work remains to be done before development can proceed. The first step is the endorsement of the Concept Plan by the Hillsboro Planning Commission and City Council. Beyond that step, further work will be part of a second phase of planning work, outlined below. These major work elements are described in more detail in Section VII of the full Concept Plan Report.

A. Development of a Market Implementation Strategy to provide information to private sector organizations potentially interested in implementation of the Concept Plan.

B. Development of a Detailed Work Program for Phase II planning.

C. Because of the complexity of the work that needs to be accomplished in Phase II, a Memorandum of Understanding among the key parties – property owners, developers, City and Metro – should be created to agree on the scope of, and responsibilities for, the work that will follow.

D. The major work elements of Phase II can be categorized as Financial/Fiscal and Policy/Regulatory/Infrastructure. These will create the final agreements, ordinances and other work products necessary to proceed with development.

D1. Financial/Fiscal:
- Market Strategy
- Development Agreements between City and Developers/Owners
- Infrastructure Phasing and Cost Estimates
- Funding Strategy and specific plans for use of implementation tools, including tax increment financing; systems development charges; local improvement district; general obligation bonds; county, metro, state and federal funding sources

D2. Policy/Regulatory/Infrastructure
- Master Planning, including:
  - comprehensive plan revisions
  - zoning code changes
  - urban design standards: architecture, streetscapes, neighborhood character, parks
  - infrastructure analysis and plans: streets, transit, pedestrian, bicycle, water, sewer, stormwater
- Regional and State policy and plan changes

E. Implementation of Development Agreements between the City and developer(s).

F. Adoption of Land Use Code Amendments.

G. Implementation of Funding Strategy for public sector projects.

H. Preparation of Engineering documents for public improvements.

I. Construction of Public Improvements
ACKNOWLEDGEMENTS

City of Hillsboro

City Council
Tom Hughes, Mayor
Ed Dennis, Councilor
Nenice Andrews, Councilor
Aron Carlson, Councilor
Joe Keizur, Councilor
Doug Johnson, Councilor
Cynthia O’Donnell, Councilor

Planning Commission
John Coulter, President
Joe Gall
Ross Mathews
Katie Eyre
Charles Fleisher
Steve Callaway
Ray Lankford

Planning Staff
Wink Brooks, Planning Director
Karla Antonini, Urban Planner III
Doug Miller, Urban Planner II
Dan Rutick, Urban Planner I
Don Odermott, Transportation Planning Engineer

OHSU/AmberGlen Project Committees

Steering Committee
Dan Dorsa
Lesley Hallick
Marilyn Lanier
Frank Parisi
Jay Fisher
Brian Pearce
Tom Bard
Bruce Fong
Jay Kenton
Craig Ramey
Brad Farmer
Trond Ingvaldsen
Betsy Murphy
Nesha Cameron
Stephen Cook
Marvin Lamacus
Ian Dees
Charles Fleisher
Katie Eyre
Randy McEwen
OHSU
OHSU
OHSU
Parisi & Parisi, PC
Prinipal Financial Group
Unico
SKB
Kaiser Permanente
Oregon University System
Regency Centers
Parr Lumber
TheStandard/ Standard Insurance Company
The Streets of Tanasbourne
Resident, 206th area
Small landowner
Resident, Walker Road area
Resident, South of planning area
Planning Commissioner
Planning Commissioner
Portland Community College

Technical Advisory Committee
Kevin Smith
Roy Gibson
Ricky Izeneogle
Lt. John Specht
John Riner
Marah Danielson
Jillian Detweiler
Jerry Green
Jennifer Garland
Gary Pippin
Gregg Leon
Carrie Pak
Astrid Dragoy
Tim O’Brien
Miranda Bateschell
Craig Eyestone
Joe Vandeveer
Trent Lutz
Cliff Crawford
Meg Fernekees
Karen Frost
Ali Sadri
Marilyn Lanier
Kristin Udvari

Hillsboro Parks and Recreation
Hillsboro Public Works
Hillsboro Building Department
Hillsboro Police Department
Hillsboro Fire Department
Oregon Dept. of Transportation
Tri-Met
Beaverton School District
Beaverton School District
Tualatin Valley Water District
Washington County Planning
Clean Water Services
Clean Water Services
Metro
Metro
AT&T Broadband
Verizon
PGE
Northwest Natural
Dept. of Land Conservation and Development
Westside Transportation Alliance
OHSU
OHSU
Ball Janik LLP

Consultants

PB PlaceMaking
Paul Morris, Principal Consultant
Brian Campbell, Project Manager
Kimi Iboshi Sloop, Deputy Project Manager
Tom Bennett, Senior Urban Designer
Kokila Lodha, Urban Designer
Emily Hull, Urban Designer
Jerry Goldberg, Senior Urban Designer/Architect

Leland Consulting Group
Dave Leland, Principal Consultant
Chris Zahas, Principal
Brian Vanneman, Associate

Kittelson and Associates
Dan Seeman, Principal Planner
Chris Tiesler, Engineering Associate
Andrew Ooms, Transportation Analyst
Ron Failmezger, Senior Engineer

SWCA Fishman
Stacy Benjamin, Senior Wetland Ecologist
Christie Galen, Senior Ecologist

PB Engineering
Isabella Bejarano, Lead Civil Engineer
Laurie Line, Senior Civil Engineer
Ron Horres, Engineering Manager
SECTION II.

Public Involvement

A. Stakeholder Interviews
B. Open House
C. Steering Committee
D. Technical Advisory Committee

March 2007
Stakeholder Interviews Preliminary Findings:

Testing a Vision

30 August 2006

Prepared for:

City of Hillsboro
150 E. Main Street, Floor 5
Hillsboro, Oregon 97123
www.ci.hillsboro.or.us

Prepared by:

PB PlaceMaking
400 SW 6th Avenue, Suite 802
Portland, Oregon 97204
www.pbworld.com/pbplacemaking/

Leland Consulting Group
610 SW Alder Street, Suite 1008
Portland, Oregon 97205
www.lelandconsulting.com
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Introduction

Project Background

The greater Tanasbourne area has emerged as one of the most successful Town Centers identified in the Portland region’s 2040 Growth Concept. Over the past 25 years, the Tanasbourne Town Center has evolved into a powerful economic engine for the State of Oregon, location of a skilled and diversified workforce, and home to many residents who enjoy the benefits of living in close proximity to employment, retailing and other vital urban services.

In order to build on the area’s success, in 2005 the City of Hillsboro began working cooperatively with the area’s major property owners, and with them initiated the “OHSU/AmberGlen Plan,” of which this report is a part. The plan area is located directly south of the Tanasbourne Town Center, with a majority of its 582 acres included in two major segments: AmberGlen Business Park, and Oregon Health and Science University (OHSU) property. The goals of the plan are to evaluate the potential expansion of the Tanasbourne Town Center, and the further transformation of the Tanasbourne and OHSU/AmberGlen areas into an increasingly urban environment with a greater intensity, density, and mix of uses.

On July 26 and 27, 2006, the OHSU/AmberGlen Plan consultant team of PB PlaceMaking and Leland Consulting Group conducted a series of confidential Stakeholder Interviews with individuals invested in the outcomes of this planning process—including major property owners, real estate professionals, public agency representatives, residents, and others. Additional stakeholders were interviewed during August. (A complete list of interviewees begins on the following page.)

This report identifies and highlights the major themes that emerged from the stakeholder interviews. Statements voiced by numerous stakeholders, and those likely to have a major impact on the final plan, are given the greatest emphasis. This information mirrors a presentation delivered by the consultant team to the project Steering and Technical Advisory Committees on 2 August 2006 (included as an appendix to this report).

The final section of this report—the Value Proposition—combines the City of Hillsboro’s OHSU/AmberGlen Vision with the essential insights gained during the stakeholder process about the steps necessary to realize the vision.
The Stakeholder Interview Process

The Stakeholder Interview process is a time-tested methodology developed by the Urban Land Institute, and employed extensively by Leland Consulting Group in many complex public and private, mixed-use, urban development and redevelopment projects across the country. The process offers a unique opportunity for interviewees to speak candidly about project opportunities as well as challenges in a confidential setting. It thus generates a wealth of perspective and knowledge for the project team. Overall findings and patterns from the interview process are reported, but specific comments are not attributed to individuals.

The OHSU/AmberGlen project team is extremely grateful for the time, enthusiasm, and ongoing effort that the stakeholders have invested in the project. The team interviewed the following stakeholders:

**Oregon Health & Science University**
- Peter Kohler, President
- Joe Robertson, Incoming President
- Keith Thomson, Chairman, Board of Directors
- Scott Gibson, Vice Chairman, Board of Directors
- Steve Stadum, Chief Administrative Officer
- Brad King, Vice President and Chief Financial Officer
- Lesley Hallick, Provost and Vice President for Academic Affairs
- Dan Dorsa, Vice President for Research
- Marilyn Lanier, Vice Provost, OGI School of Science and Engineering
- Ali Sadri, Assistant Director, Facilities Management and Construction
- Jay A. Nelson, Director, OHSU Vaccine and Gene Therapy Institute
- Susan Smith, Director, Oregon National Primate Research Center
- Edward Thompson, Vice President and Dean, OGI School of Science and Engineering

**Property Owners**
- Frank Parisi, legal representative, Principal Financial Group
- Tom Bard, Managing Principal Partner, Scanlan Kemper Bard
- Trond Ingvaldsen, Assistant Vice President of Real Estate, The Standard
- Bruce Fong, Senior Project Manager of Design & Construction, Kaiser Permanente
- Betsy Murphy, General Manager, The Streets of Tanasbourne
- Brad Farmer, Property Manager, Parr Lumber
- Jay Kenton, Vice Chancellor for Finance and Administration, Oregon University System
Real Estate Professionals
- Fred Bruning, CenterCal Properties
- Charles Conrow, Senior Broker, Norris and Stevens
- Scott Eaton, Principal, Gerding Edlen Development
- Gary Griff, Senior Director, Cushman & Wakefield
- Rob Hinnen, Trammell Crow Residential
- Bob LeFeber, Principal Broker, Commercial Realty Advisors Northwest
- Deanna Palm, Hillsboro Chamber of Commerce
- Brian Pearce, Unico
- Craig Ramey, Senior Vice President, Regency Centers
- Walter Remmers, Don Guthrie, and Dan Grimberg, West Hills Development
- Mark Whitlow, Partner, Perkins Coie LLP
- Homer Williams, Chairman, Williams and Dame Development

Residents and Neighbors
- Stephen Cook
- Jean Bates
- Paul and Linda Moody
- Kevin and Linda Connell
- Neisha Cameron
- Ian Dees
- Mary Manseau

Government Officials and Public Agency Staff
- Tom Hughes, Mayor, City of Hillsboro
- John Coulter, Planning Commission President, City of Hillsboro
- Steve Greagor, Parks Director, City of Hillsboro
- Katie Eyre, Hillsboro Planning Commissioner
- David Bragdon, Metro Council President
- Mike Jordan, Chief Operating Officer, Metro
- Andy Cotugno, Planning Director, Metro
- Chris Deffebach, Director, Long Range Planning, Metro
- Phil Whitmore, Transit Oriented Development Program Manager, Metro
- Jillian Detweiler, TriMet
- Mark Ellsworth, Regional Coordinator, State Economic Revitalization Team
The OHSU/AmberGlen Vision

Testing a Vision
The consultant team began the interview process with a description of a potential vision for the study area and strong direction from the city in support of that vision. Thus, a critical part of the process was explaining as well as testing the vision with stakeholders and then gaining an understanding of their perceptions of the strengths, weaknesses, and strategies for implementation of the concept. That vision will:

- Transform the greater Tanasbourne area, including the OHSU/AmberGlen element, to an entirely new level of urban development.
- Achieve higher levels of density in residential, employment, retail, educational, cultural, entertainment, and institutional development.
- Provide high quality amenities and a pedestrian-oriented, urban environment to support the intensified environment.
- Elevate a Region 2040 suburban town center to a major regional activity center.

Why Here? Why Now?
The vision serves a number of public goals articulated by the City of Hillsboro:

- Creating a special place
- Maintaining a jobs – housing balance
- Meeting an ongoing demand for jobs and housing
- Relieving density pressures in single-family neighborhoods. (Higher housing densities here will result in lower required density elsewhere.)
- Planning for an uncertain energy future, in which non-auto modes of transportation become increasingly desirable.
- Taking advantage of the light rail line to better connect the area with the region.

Of course, no vision can become reality without strong public and private backing, and the necessary market conditions required for support. The initial understanding of the OHSU/AmberGlen area and its place in the larger marketplace suggest that there are a number of good reasons to believe that the market supports and encourages realization of the vision.
The right location. The OHSU/AmberGlen area occupies a unique and desirable location approximately 1.5 miles from Intel’s Ronler Acres facility, and has easy access to the rest of the high-tech jobs of the region’s “silicon forest.” The area is also adjacent to the Tanasbourne Town Center, one of the region’s most successful 2040 Centers, which includes a mix of thriving retail, housing, and employment activities. The Streets of Tanasbourne is a highly successful retail lifestyle center at the heart of the Tanasbourne area. More employment is on its way in Tanasbourne, with an estimated 7,000 to 8,000 jobs to be added by a new Kaiser medical facility, office jobs at the Standard Insurance site, and other adjacent developments. The Town Center has also proved to be a popular concentration of medium density rental housing.

Demographics. The following demographic characteristics are positive for the vision, as they are reflective of the types of households, in Oregon and across the country, that are likely to choose higher-density housing coupled with high-quality urban amenities. The characteristics also reflect a population that is willing and able to pay for the higher costs of higher density housing.

- One and two person households
- Two-income households
- Educated workforce
- Significant foreign-born population
- High tech, higher income
- Seeking alternatives to central Portland

The right time. Initial project reconnaissance also shows that the following general ownership and development patterns support the vision.

- Several large property owners, including OHSU, Principal Financial Group, and SKB, control the majority of the area’s 582 acres.
- These owners are considering development options.
- A significant portion of the land in the area is vacant or underdeveloped.
- Developers and merchant bankers have shown strong interest in redevelopment.
Preliminary Findings: What We Heard

Overall Reactions

- The majority of stakeholders were enthusiastic about the vision. They were in favor of intensifying uses, creating an urban environment with high-quality amenities, and making a special place.

- Some expressed reservations, mainly stemming from doubts about whether the market would support certain aspects of intensified development.

- Enthusiasm was common throughout stakeholder groups. Support was expressed from institutional representatives, property owners, developers, public agency staff, and community members.

Place Making Challenges

- Some of the central concerns regarding the realization of the vision centered around Place Making. These concerns included:
  - What are the amenities that will make this place special?
  - What will draw people here?
  - Why will people be willing to live here at higher densities and potentially higher prices?
  - How much is needed to start a transformation?

Land Ownership & Site Control

- Stakeholders shared the project team’s assessment of the strategic benefits of having only a few property owners – reinforcing a potential ability to effect a great plan for the study area.

- Some owners are considering further land sales, which could weaken the planning process by fracturing the site into smaller holdings, more owners and therefore, more difficulty in achieving a unified plan.

- The combination of a few large holdings coupled with strong interest from highly qualified and well capitalized developers establishes a condition of significant opportunity.
OHSU

- The Primate Center will stay in its current location, and is expected to continue to generate ongoing demand for nearby medical, office, and lab space. These uses should be considered in the site plan.
- OHSU is planning to sell surplus properties at the Western Campus.
- OHSU wants to ensure that a greater intensification of uses does not compromise its operations, specifically the Primate Center. The organization seeks to ensure that future uses are compatible and that there is a sufficient physical buffer with new uses.

Housing Market – Big Picture

- There was no consensus on the question of whether or not the economics of higher-density housing will work. To a large degree, this diversity of opinion reflected the variety of housing developers interviewed, and their level of experience in building a high-density product. Some were confident the market and timing was right to build higher-density here, while others had serious doubts that the amenity package would be strong enough to justify the higher costs of high-density building.

- Structured parking was mentioned repeatedly as an expensive component of high-density building and that developers may not be able to build cost-effectively. Developers asked if the public sector might pay for some of the costs of structured parking.

- Workforce housing is needed, due to the thousands of middle-class jobs that exist or will come to the area. One stakeholder recommended an area where, “Both the doctor and the nurse can live.”

- “Back into” the market vs. “Big Bang.” Some stakeholders recommended testing the market for urban-style living with medium density projects (three to four story buildings possibly involving townhouse-style units) before building taller structures. Others were confident that the market is right and that only a “big bang” of development will create the necessary momentum.

- Place Making challenges were seen as key. Potential residents will not be likely to choose this area over true higher-density, urban locations (such as the Pearl District) or typical suburban areas without a unique sense of place and the right amenity package.

- Capable developers are a must! There is a limited pool of developers, in the region and beyond with the experience and capital required to undertake a community-building project of this scope. The city and project team should not expect developers without high-density, urban-style development experience to deliver on the vision.

- What is the best mix of housing with other project elements?
Housing Market – For Sale

- Strong demographics and proximity to employment. Stakeholders reiterated the project team’s view that these factors could be strong drivers of the for-sale housing market.

- For-sale housing can better achieve the necessary price points for urban housing than can rental housing. Local apartment rates have not reached a level necessary to support structured parking.

- A housing “knowledge transfer” is needed – from public agencies and private developers experienced in creating high-density urban environments to local public officials and developers. There is no local suburban example of the stated vision – it must be interpolated from other areas.

- Interest rates are rising – is the timing right? Will the housing market remain as hot as it has been during the past five years? When will the national housing slowdown reach Oregon and how long will it last?

- Evaluating the market will be a challenge. With few comparables to examine, a traditional market study may fail to accurately project the demand for this market-leading type of development.

Housing Market – Rental

- Will rents justify the costs? As in the overall housing market, higher building costs, especially with regards to structured parking, drive up rents.

- Rental housing (with high turnover) requires exposure to traffic. Limited traffic drive-by equals lower visibility. Rentals will require good automobile access through the site to give the necessary exposure.

- Medium-density housing – several thousand units – developed by Trammell Crow has proven the market acceptance of living in the Tanasbourne area.

Office and Employment Market

- 7,000 to 8,000 new employees are expected at Kaiser and Standard Insurance sites. This will create a major additional source of employment and identity for the area. The employment can drive other uses as well.

- The office market in Washington County, and AmberGlen in particular, is much improved since the burst of the dot-com bubble, but is still at 20% vacancy or higher – moving slowly to achieve equilibrium.
However, AmberGlen and OGI are ready for redevelopment. Many of the area’s older buildings do not meet the demands of today’s office market—which is evidenced by higher-than-average vacancy rates. Thus, the land (or at least some of it) is ready to be recycled for new uses.

OHSU generates spin-off businesses, which could be part of the site program. The City of Hillsboro would like to see more Biotech industry established in this area.

Intel is a major consideration. The company’s decisions about increasing or decreasing its workforce will affect demand for housing.

“Retain and expand existing number of jobs here.” Stakeholders felt that new Washington County employers have too few potential sites suitable into which they can expand, and that the transformation of the AmberGlen Business Park to residential use will further exacerbate the tight land supply.

Mixed-use medical office can earn more. Some developers have seen significant rent premiums for medical office space in medium-density mixed-use environments in the Portland area. However, it is not clear whether or not these rent premiums justify the higher construction costs required for this building type.

Retail

The Streets of Tanasbourne is a retail amenity and project anchor. Segments of the residential market will want to live close to the lifestyle center.

Potential for retail expansion. Developers say that there is considerable room for additional retail space near the Streets of Tanasbourne because of the lifestyle center’s modest size. Development at OHSU/AmberGlen could tap into this excess demand.

Focus future retail at northern edge of site, with additional retail following a N-S axis. This will build on the momentum of the Streets of Tanasbourne and potentially bring energy into the core of the area.

Use retail to help create the place. Active retail environments define the feel of many mixed-use districts, even when they are not the dominant use. And even when retail has relatively little direct impact on the overall financial success of a building, engaging shops make office or residential space above more appealing and more profitable.

High-end residential will support more retail.

Despite retail success, this is a “hidden” location. The Streets of Tanasbourne and other retail seem to have succeeded despite their location, not because of it. Unlike most other major shopping destinations, the center is not directly off of a major highway.
Transportation

- Auto
  - Overall, the level of connectivity is insufficient—within the site and to outside areas—to support the level of intensity envisioned.
  - New or expanded north-south and east-west connections will be needed. One east-west alignment, bordering the OHSU property to the north, was repeatedly recommended, but may not fit with OHSU’s needs.
  - Congestion is heavy during peak hours today and could worsen. Particularly congested roads include Cornell, NW 185th Avenue, and Walker Road.
  - Walker Road needs to be widened and improved. It currently varies between five and two lanes in the study area.

- Pedestrian and Transit
  - A street network featuring better connectivity and a finer-grain pattern of streets will be necessary to foster a walkable, higher-density, mixed-use environment.
  - High quality pedestrian environment. Wide sidewalks, trees, benches, and lampposts are among the amenities that will improve the walking experience in the area.
  - Improve pedestrian connections to Streets of Tanasbourne.
  - A “circulator.” A public transportation circulator—whether bus, jitney, or streetcar—was mentioned by many different stakeholder groups. The circulator would connect activity nodes along a north-south axis: MAX, central AmberGlen site, Streets of Tanasbourne, Kaiser, and Standard Insurance.
  - Improve connections to MAX, and parking at MAX stations.

Open Space

- Clear consensus throughout all stakeholder groups on the need for one or more significant and unique open spaces. Such spaces would serve several purposes. They would serve as major amenities that make a higher-density, urban lifestyle more appealing. They would also add a unique design element that would enable visitors to quickly identify this place.

- Major park, a park system, and a lake were the primary types of open space suggested.
Bronson Creek is an open space asset and challenge. It will be difficult to maximize the creek’s potential as both an active open space and a physical buffer with OHSU. It currently operates effectively as a buffer. OHSU is resistant to the idea of introducing large numbers of park users to the creek area due to concerns about security.

The AmberGlen “lake” and surrounding area, located in the midst of the business park, is a popular amenity. Some recommended simply expanding this feature.

Rock Creek, to the west of the site, was mentioned as a possible example of a well-designed open space. During peak use hours this is a relatively high-use space.

Other Suggested Program Elements

- Sports/Athletic club
- Hotel
- PCC/PSU Campus. (PCC is building a new facility at the Willow Creek MAX station. PSU and other Oregon universities have held classes at the Capital Center on 185th Avenue, but will move their operations.)
- Schools: elementary through secondary. The Beaverton School District is crowded and is likely seeking new school sites. The introduction of many new households to the study area means new school-age children.
- Civic spaces—plazas, libraries, and/or public buildings—were recommended.
- Entertainment and cultural facilities.

Political/Leadership Issues

- Hillsboro
  - The City of Hillsboro was consistently viewed across stakeholder groups as a “good partner.”
  - Wink Brooks and Dave Lawrence departures from the city due to retirement present a big concern. Stakeholders have no assurance that the new city leadership will provide the same quality management or commitment to the vision.
  - Institutionalize the vision in next 18 months, before the senior staff departures.
Past successes—Ronler Acres, Sunset Corridor, Tanasbourne Town Center, Downtown Hillsboro—create confidence and valuable development models.

- Beyond Hillsboro—other agencies
  - Champions will be needed in the private sector, and at multiple government levels—from city staff and council, to county, regional, state, and federal leaders.
  - Champions exist today at these levels. Stakeholders from the private and public sectors were enthusiastic about the vision and willing to take the necessary steps to see it through.
  - Public-private partnerships are essential.
  - Public investments crucial. These could include investments in roads, utilities, open spaces, and/or circulators.
  - The role of Metro is very important—this is an opportunity to establish a new type of center within the Region 2040 concept.

Potential Public Financing Tools
- Many tools—from local to federal—are available. These include, but are not limited to:
  - Systems Development Charges (SDC)
  - Tax Increment Financing (TIF)
  - Local Improvement District (LID)
  - Tax abatement
  - Metro’s current and new funding tools for centers. An exploration of new tools, which could be used here, is underway as part of the New Look process.
  - The expansion of the Tanasbourne Town Center boundary, or creation of a new center designation, would mean greater likelihood of Metropolitan Transportation Improvement Program (MTIP) funding.
  - Metro regional parks bond (November ballot) or local parks bond.
  - State funding, such as Transportation Growth Management (TGM).
  - Federal funding, such as New Starts (transit) or Congestion Management and Air Quality (CMAQ).
During the initial phases, stakeholders urged that the project team “keep all financing tools on the table” for discussion.

Establishing the Market for the Vision

- The traditional market study may pose a problem because such studies project future demand based on the current market. Thus it is difficult to establish the existence of a market for a major transformation of Place Making.

- A market strategy examines that which is desired and then identifies the necessary conditions, tools, policies, and other support required to achieve the strategy. For this reason, public financing within a public-private partnership will be vital to achieving the vision and the strategy.

- The population of most major metropolitan areas is educated about the benefits of urban living and the variety of urban housing products that can be developed. Other than downtown Portland and Lloyd Center, this region has not yet provided any such living alternatives to the public.
Value Proposition

The Value Proposition is an expression of the benefits expected to result from the realization of the OHSU/AmberGlen Vision, and the actions necessary to reach the vision.

It was developed after the Stakeholder Interviews by the consultant team to build on the original vision, and lessons and insights generated by the interviews. Following the Value Proposition is a list of more specific short-term Next Steps that will be necessary in order to maintain the positive momentum of this planning process.

Achieving the vision will result in:

- A regionally significant urban center with homes, jobs, open spaces, and other elements.
- A source of pride and differentiation for Hillsboro.
- A high-quality environment for residents, employees, shoppers, guests.
- Substantially increased property values.
- A continuing driver of economic growth.

Achieving the vision will require:

- A shared plan.
- Teams of public and private partners.
- Long-term commitment of partners to implement the vision.
- Ongoing public and private investment.

Implementing the Vision—Next Steps

- Halt current land sales activity in order to lock down a strategy and plans.
- Involve selected, capable developers.
- Create a Memorandum of Understanding (MOU) amongst project partners.
- Define a new entitlement process within the study area – probably a new zoning designation and design control overlays as well as minimum development criteria so as not to squander the resource and dilute the vision.
• Write development agreements.

• Create a predictable timetable.

• Evaluate potential new Metro/Hillsboro Center designation.

• Re-brand the district to better integrate Tanasbourne into Hillsboro (much of the public think Tanasbourne is Beaverton).

• Commit public financing instruments.

The Past as Guide

One stakeholder offered this perspective on the OHSU/AmberGlen project:

“20 years ago, Hillsboro was visionary. The city looked ahead, worked together and created all this—Ronler Acres, the Sunset high tech corridor, and Tanasbourne—now it needs to create a 21st century place that builds on that track record of success.”
Appendix:
August 2 Steering Committee Presentation

Presentation Outline
- Stakeholder Interview process
- AmberGlen/OHSU Vision
- Preliminary findings—what we heard
- Value proposition

Stakeholder Interview Process
- The Urban Land Institute's time-tested methodology
- More than 60 interviews
- Wide range of perspectives
- Quick intake of issues and opportunities
- Testing a Vision

Stakeholders
- Major property owners: OHSU, OUS, Principal Financial Group, SKB, Standard Insurance, Streets of Tanasbourne, LaSalle, PARR
- Developers: residential, retail, office
- Brokers
- Public agencies: Metro, TriMet, City of Hillsboro, others
- Residents From within and beyond the study area

Achieving Public Goals
- Creating a special place
- Jobs – housing balance
- Meet ongoing demand for jobs and housing
- Relieve density pressures in single-family areas
- Planning for an uncertain energy future
- Take advantage of light rail

The AmberGlen/OHSU Vision
- Transform all of Tanasbourne area to an entirely new level of urban development.
- Achieve higher levels of density in residential, employment, retail, and institutional.
- Provide high quality amenities and a pedestrian-oriented, urban environment.
- Elevate a suburban town center to a major regional activity center—self-sustaining satellite city.
Place Making

“The process of identifying and revitalizing underutilized private and public spaces that results in the fundamental transformation of community.”

Why here? Why now?

- The right location
  - Access to significant employment—“Oregon’s economic engine”
  - Tanasbourne—successful 2040 Town Center
  - More jobs coming at Kaiser, Providence, Standard Insurance, other
  - Retail variety and strength
  - Build on extensive housing base

Why here? Why now?

- Demographics
  - One and two person households
  - Two income households
  - Educated workforce
  - Significant foreign-born population
  - High tech, higher income
  - Seeking alternatives to Portland

Why Here? Why Now?

- The right time
  - Several large property owners
  - Owners considering development options
  - Vacant and underdeveloped land
  - Strong interest by developers and merchant bankers
  - Ready for selective recycling

WHAT WE HEARD

Overall Reactions to the Vision

- The majority of stakeholders are enthusiastic about the vision
- Some expressed reservations (mainly market)
- Enthusiasm common throughout stakeholder groups—public and private

WHAT WE HEARD

Place Making Challenges

- What are the amenities that will make this place special?
- What will draw people here?
- Why will people be willing to live here at higher densities?
- How much is needed to start a transformation?
> **WHAT WE HEARD**
> **Land Ownership & Site Control**
> - Several very large holdings
> - Overall, not many owners
> - Purchasers of strength
> - Some owners considering further sales

---

> **WHAT WE HEARD**
> **OHSU**
> - Primate Center to stay
> - Seeking to sell surplus properties
> - Compatibility and buffering necessary
> - Primate Center generates demand for nearby medical/office/lab space

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> **WHAT WE HEARD**
> **Housing Market – Big Picture**
> - Costs are a challenge—structured parking
> - Will people pay a price premium?
> - Workforce housing is needed
> - “Back into” the market vs. “Big Bang”
> - Sense of place—necessary attractions
> - What’s the best mix?

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> **WHAT WE HEARD**
> **Housing Market – For Sale**
> - Strong demographics
> - Proximity to employment
> - Housing knowledge transfer
> - Will high-density work?
> - Interest rates rising—is the timing right?
> - How to evaluate the market
> - Capable developers—a must!

---

> **WHAT WE HEARD**
> **Housing Market - Rental**
> - Will rents justify the costs?
> - Structured parking leads to higher rents
> - Limited drive-by traffic—visibility issue
> - Local economics favor for sale

---

> **WHAT WE HEARD**
> **Office and Employment Market**
> - 7,000 new employees at Kaiser and Standard Insurance
> - OHSU spin-off businesses
> - Rent premium for high-density, mixed-use
> - Intel: a major consideration
> - “Retain and expand existing number of jobs here.”
> - AmberGlen and OGI: ready for redevelopment
### Retail
- Streets of Tanasbourne: amenity and anchor
  - Potential for expansion
  - Focus future retail at northern edge of site
  - Despite success, a “hidden” location
- Use retail to help create the place
- High-end residential will support more retail

### Transportation - Auto
- Insufficient connectivity
- Need new North-South and East-West connections
- Congestion today—solutions needed
- E-W road adjacent to OHSU undesirable
- Walker Road bottleneck

### Transportation – Pedestrian and Transit
- Street network—better connectivity
- High quality pedestrian environment
- “Circulator” connecting activity to LRT
- Multi-modal North—South axis
- Improve connection to MAX and parking
- Improve pedestrian connections to Streets of Tanasbourne

### Open Space
- Major park or park system
- Lake (size?)
- Civic spaces
- Bronson Creek: open space asset and challenge
- Build on fountain and lake area
- Rock Creek: possible example

### Other Suggested Program Elements
- Sports/Athletic club
- Hotel
- PCC/PSU Campus
- Schools: elementary through secondary
- Civic spaces

### Political/Leadership Issues
- Hillsboro
  - City of Hillsboro: “a good partner”
  - Brooks and Lawrence departures—a big concern
  - Institutionalize the vision in next 18 months
  - Past successes: Ronler Acres, Sunset Corridor, Tanasbourne, Downtown Hillsboro
**WHAT WE HEARD**

**Political/Leadership Issues**
- Beyond Hillsboro—other agencies
  - Champions needed at multiple levels
  - Champions exist today
  - Public-private partnerships crucial
  - Public investments crucial

**Potential Public Financing Tools**
- Many tools—from local to federal—are available
  - Systems Development Charge (SDC)
  - Tax Increment Financing (TIF)
  - Local Improvement District (LID)
  - Regional and state assistance
- Keep all financing tools on the table
  - Metro’s new Centers funding tools

**WHAT WE HEARD**

**Proving the Market for the Vision**
- The dilemma of the market study:
  - Projecting the future based on the past
  - Market study vs. market strategy
  - Interpolation
  - Educated market

**Value Proposition**
- Achieving the vision will result in:
  - Regionally significant urban center with homes, jobs, open spaces, and other elements
  - Source of pride and differentiation for Hillsboro
  - High-quality environment for residents, employees, shoppers, guests
  - Substantially increased property values
  - Enhanced driver of economic growth

**Value Proposition**
- Achieving the vision will require:
  - Shared plan
  - Teams of public and private partners
  - Long-term commitment of partners to implement the vision
  - Ongoing public and private investment
  - Halt to land sales to lock down a strategy and plans

**Implementing the Vision - Next Steps**
- Involve selected, capable developers
- Memorandum of understanding
- New entitlements processes
- Development agreements
- Predictable timetable
- New Metro/Hillsboro designation
- Commitment of public financing instruments
The Past as Guide

“20 years ago, Hillsboro was visionary. The city looked ahead, worked together and created all this—Ronler Acres, the Sunset high tech corridor, and Tanasbourne—now it needs to create a 21st century place that builds on that track record of success.”

Our work requires two abilities - first, the technical skill and second, the mind and the knowledge to conceive that which is useful and will be for the convenience of mankind in the long run...It is not the design that governs but its adaptability to the existing and social needs of the time.”

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## OPEN HOUSE PARTICIPANTS

**21st AUGUST 2006**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachem</td>
<td>Wolfgang</td>
<td><a href="mailto:BJBACHEM63@msn.com">BJBACHEM63@msn.com</a></td>
</tr>
<tr>
<td>Baker</td>
<td>Al</td>
<td><a href="mailto:albaker33@comcast.net">albaker33@comcast.net</a></td>
</tr>
<tr>
<td>Carey</td>
<td>Robert H.</td>
<td><a href="mailto:RHCTPG@aol.com">RHCTPG@aol.com</a></td>
</tr>
<tr>
<td>Causey</td>
<td>Debbie</td>
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<tr>
<td>Causey</td>
<td>Terry</td>
<td></td>
</tr>
<tr>
<td>Cook</td>
<td>Christel</td>
<td><a href="mailto:seccuc@verizon.net">seccuc@verizon.net</a></td>
</tr>
<tr>
<td>Cook</td>
<td>Steve</td>
<td></td>
</tr>
<tr>
<td>Dudeck</td>
<td>Sherry</td>
<td><a href="mailto:srgidudeck@msn.com">srgidudeck@msn.com</a></td>
</tr>
<tr>
<td>Engbretsch</td>
<td>Suze</td>
<td><a href="mailto:Mikeorsuze@verizon.net">Mikeorsuze@verizon.net</a></td>
</tr>
<tr>
<td>Fast</td>
<td>Bill</td>
<td><a href="mailto:w.fast@comcast.net">w.fast@comcast.net</a></td>
</tr>
<tr>
<td>Frischknecht</td>
<td>Dean</td>
<td><a href="mailto:dean@collegegolf.com">dean@collegegolf.com</a></td>
</tr>
<tr>
<td>Gratchner</td>
<td>Jay</td>
<td><a href="mailto:Jay.Gratchner@cingular.com">Jay.Gratchner@cingular.com</a></td>
</tr>
<tr>
<td>Isaak</td>
<td>Holly</td>
<td><a href="mailto:hki@operamail.com">hki@operamail.com</a></td>
</tr>
<tr>
<td>James</td>
<td>David</td>
<td><a href="mailto:davej@1davej.com">davej@1davej.com</a></td>
</tr>
<tr>
<td>Krummel</td>
<td>Walter A.</td>
<td></td>
</tr>
<tr>
<td>LaBreche</td>
<td>Mary</td>
<td><a href="mailto:labreche3@juno.com">labreche3@juno.com</a></td>
</tr>
<tr>
<td>Lamascus</td>
<td>Marvin</td>
<td><a href="mailto:LAMASCUS@ohsu.edu">LAMASCUS@ohsu.edu</a></td>
</tr>
<tr>
<td>Lopez</td>
<td>Jason</td>
<td><a href="mailto:lopezjm@comcast.net">lopezjm@comcast.net</a></td>
</tr>
<tr>
<td>Mathis</td>
<td>Joseph</td>
<td><a href="mailto:joseph.mathis@intel.com">joseph.mathis@intel.com</a></td>
</tr>
<tr>
<td>Mortimore</td>
<td>Louise</td>
<td><a href="mailto:lmortimore@comcast.net">lmortimore@comcast.net</a></td>
</tr>
<tr>
<td>Olye</td>
<td>Naya</td>
<td><a href="mailto:sokoye@uhs.org">sokoye@uhs.org</a></td>
</tr>
<tr>
<td>Perry</td>
<td>Aleathea</td>
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<td>Rainey</td>
<td>Lauren L.</td>
<td></td>
</tr>
<tr>
<td>Ramineni</td>
<td>Nari</td>
<td><a href="mailto:nari_ramineni@yahoo.com">nari_ramineni@yahoo.com</a></td>
</tr>
<tr>
<td>Rosato</td>
<td>Jim</td>
<td><a href="mailto:JROSATO@DADCO.COM">JROSATO@DADCO.COM</a></td>
</tr>
<tr>
<td>Schuler</td>
<td>Jack</td>
<td><a href="mailto:JKSb@comcast.net">JKSb@comcast.net</a></td>
</tr>
<tr>
<td>Schuler</td>
<td>Kathy</td>
<td><a href="mailto:JKSb@comcast.net">JKSb@comcast.net</a></td>
</tr>
<tr>
<td>Sherman</td>
<td>Bonnie</td>
<td><a href="mailto:bsherman16@verizon.net">bsherman16@verizon.net</a></td>
</tr>
<tr>
<td>Wheeler</td>
<td>Jerrold</td>
<td><a href="mailto:jeroldandtari@hotmail.com">jeroldandtari@hotmail.com</a></td>
</tr>
<tr>
<td>Woodbury</td>
<td>Scott</td>
<td><a href="mailto:s.woodbury@comcast.net">s.woodbury@comcast.net</a></td>
</tr>
<tr>
<td>Woodbury</td>
<td>Florence</td>
<td><a href="mailto:flo.woodbury@comcast.net">flo.woodbury@comcast.net</a></td>
</tr>
</tbody>
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# OPEN HOUSE PARTICIPANTS
## 9TH SEPTEMBER 2006

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron</td>
<td>Neshia</td>
<td><a href="mailto:donlcramer@msn.com">donlcramer@msn.com</a></td>
</tr>
<tr>
<td>Cramer</td>
<td>Don</td>
<td><a href="mailto:dczeck@gmail.com">dczeck@gmail.com</a></td>
</tr>
<tr>
<td>Czeck</td>
<td>David</td>
<td><a href="mailto:mickelliott2002@yahoo.co.uk">mickelliott2002@yahoo.co.uk</a></td>
</tr>
<tr>
<td>Elliott</td>
<td>Mick</td>
<td><a href="mailto:jim.fazzi@att.net">jim.fazzi@att.net</a></td>
</tr>
<tr>
<td>Fazzio</td>
<td>J.</td>
<td></td>
</tr>
<tr>
<td>Frischknecht</td>
<td>Dean</td>
<td><a href="mailto:christie.gehring@gmail.com">christie.gehring@gmail.com</a></td>
</tr>
<tr>
<td>Gehring</td>
<td>Christie</td>
<td><a href="mailto:fre@h-1.org">fre@h-1.org</a></td>
</tr>
<tr>
<td>Heinz</td>
<td>Frederik</td>
<td><a href="mailto:labreche3@juno.com">labreche3@juno.com</a></td>
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<td><a href="mailto:lamascus@ohsu.edu">lamascus@ohsu.edu</a></td>
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<tr>
<td>Larsen</td>
<td>Terry C.</td>
<td></td>
</tr>
<tr>
<td>McPherson</td>
<td>Patricia K.</td>
<td><a href="mailto:SCUBAROJO@COMCAST.NET">SCUBAROJO@COMCAST.NET</a></td>
</tr>
<tr>
<td>Medina</td>
<td>Rhea</td>
<td><a href="mailto:kschoenfelder@kginvestment.com">kschoenfelder@kginvestment.com</a></td>
</tr>
<tr>
<td>Rojo</td>
<td>Dennis</td>
<td><a href="mailto:KSMYTH@JCRDEVCO.COM">KSMYTH@JCRDEVCO.COM</a></td>
</tr>
<tr>
<td>Schoenfelder</td>
<td>Kim</td>
<td><a href="mailto:dmhak-misc@yahoo.com">dmhak-misc@yahoo.com</a></td>
</tr>
<tr>
<td>McPherson</td>
<td>Patricia K.</td>
<td><a href="mailto:dmhak-misc@yahoo.com">dmhak-misc@yahoo.com</a></td>
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<tr>
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<td>Kim</td>
<td><a href="mailto:kschoenfelder@kginvestment.com">kschoenfelder@kginvestment.com</a></td>
</tr>
<tr>
<td>Smyth</td>
<td>Kate</td>
<td><a href="mailto:KSMYTH@JCRDEVCO.COM">KSMYTH@JCRDEVCO.COM</a></td>
</tr>
<tr>
<td>Tayeb</td>
<td>Danika</td>
<td><a href="mailto:dmhak-misc@yahoo.com">dmhak-misc@yahoo.com</a></td>
</tr>
<tr>
<td>Tayeb</td>
<td>Jamal</td>
<td><a href="mailto:dmhak-misc@yahoo.com">dmhak-misc@yahoo.com</a></td>
</tr>
<tr>
<td>Upson</td>
<td>R.</td>
<td><a href="mailto:bbupson@verizon.com">bbupson@verizon.com</a></td>
</tr>
<tr>
<td>Varela</td>
<td>Pauline</td>
<td><a href="mailto:RPVARELA@PRODIGY.NET">RPVARELA@PRODIGY.NET</a></td>
</tr>
<tr>
<td>Varela</td>
<td>Raul</td>
<td><a href="mailto:RPVARELA@PRODIGY.NET">RPVARELA@PRODIGY.NET</a></td>
</tr>
<tr>
<td>Wallace</td>
<td>Arlene</td>
<td><a href="mailto:arlenew@pdx.edu">arlenew@pdx.edu</a></td>
</tr>
<tr>
<td>Wilson</td>
<td>Duane</td>
<td><a href="mailto:dwilson@RCMHomes.net">dwilson@RCMHomes.net</a></td>
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OHSU/AmberGlen Area Plan
Steering Committee Meeting

Wednesday August 2, 2006
4:00 p.m.

Hillsboro Civic Center
Room 207
150 E. Main Street

REVISED AGENDA

I. Introductions
II. Project Description, Process and Schedule
III. Overview of Existing Conditions
   • Transportation
   • Infrastructure
   • Environmental
   • Other Services
IV. Overview of Stakeholder Interviews
V. Discussion
VI. Next steps
VII. Adjourn
Members Present

Katie Eyre, City Of Hillsboro, Planning Commissioner
Charles Fleisher, City of Hillsboro, Planning Commissioner
Brad Farmer, Parr Lumber
Larry Simonsmeier, OHSU (for Dan Dorsa)
Marilyn Lanier, OHSU
Craig Ramey, Regency Centers
Betsy Murphy, Streets at Tanasbourne
Frank Parisi, for Principal Financial Group
Nesha Cameron, Resident of 206th Avenue residential area
Marvin Lamascus, Representative from the Superblock
Stephen Cook, Small landowner
Bruce Fong, Kasier Permanente
Brian Pearce, Unico
Jay Kenton, Oregon University System

Project Team Members Present

Brian Campbell, PB PlaceMaking
Dave Leland, Leland Consulting Group
Wink Brooks, City of Hillsboro, Planning Director
Karla Antonini, City of Hillsboro, Senior Planner
Doug Miller, City of Hillsboro, Urban Planner II

1. Introductions

Wink Brooks briefly introduced the project and then all Steering Committee and project team members introduced themselves. Brooks thanked the Steering Committee members for participating in the OHSU/AmberGlen Area planning process. He then introduced Brian Campbell, PB PlaceMaking Consultant, Team Project Manager and Dave Leland from Leland Consulting Group as well as city staff, Karla Antonini and Doug Miller.

2. Project Description, Process and Schedule

Brian Campbell outlined the goals of the project:

1) Provide opportunity to create high value mixed-use area
2) Create a cohesive plan that links the various character and land uses of
individual developments. Future land uses should complement each other and provide
excellent access to employment and transportation Build a community not separate
projects
3) Create strategies for public/private partnerships
4) Adopt specific measures to make the area a success

Mr. Campbell briefly described the objectives of the planning project:
1) Understand the area’s position in and impact on the market
2) Building a community, not separate projects
3) Create a pedestrian friendly place, critical to using multi-modal options
4) Optimize connectivity
5) Stress results over regulation
6) Create a critical mass of mixed-use development for an active 18-hour center

Mr. Campbell then discussed the schedule and work tasks of the project. He noted that the
planning effort would be completed by the end of November. He then discussed the phases and
work tasks of the project. Phase I: Strategy and Reconnaissance includes work tasks 1 through 5.
The purpose of this phase is to understand the expectations of Metro, City of Hillsboro and other
jurisdictions for the area as well as the future development plans for each major stakeholder. The
consultants have conducted most of the stakeholder interviews. Potential links to the greater
Tanasbourne area will be reviewed during this phase as well as identifying potential
implementation strategies. Existing condition reports for the planning area are in draft form and
will be distributed next week. Mr. Campbell noted that the existing conditions, especially
transportation, will be critical in this planning effort.

Mr. Campbell explained Phase II: Physical Planning which includes work tasks 6 and 7. The
purpose of this phase is to create two alternatives that will be created during a design workshop
(charette) where participants create a variety of land use and design concepts for the area. It will
be important to consider all infrastructure issues at this time. We will be inviting all steering
committee members and some TAC members to the charette on August 24th. An open house will
occur on October 9th to inform the public on the planning process thus far and present the two
alternative concept plans that were created. Refinement of the concept plan will be completed by
the end of October. The product for work task 7 is the final area plan and report which is
expected to be completed by the end of November. Throughout the planning process the City
Council and Planning Commission will be kept informed through work sessions.

Mr. Campbell noted that Phase III: Implementation is not part of the work program. It is the key
piece that is missing. There is an assumption that private stakeholders will agree to pay for
implementation.
3. **Overview of Existing Conditions**

Mr. Campbell noted that the consultant team has completed rough drafts of the existing conditions reports. The information presented today is not in final form. He reiterated that the existing conditions reports will be sent out early next week and asked that the Steering Committee review the reports as the reports will provide background information for the charrette process.

**Traffic / Transportation**

Mr. Campbell reviewed Kittelson’s analysis of existing transportation conditions. East/west and north/south connections are important to provide adequate traffic circulation. Cornelius Pass is currently technically over capacity. Walker Road, 185th, and 206th will be over capacity by 2020. Creative solutions are needed. Non-auto transportation alternative will be important. Hillsboro’s TSP addresses many of the issues identified but many of the proposed solutions are unfunded.

**Public Infrastructure**

Existing water, sewer and stormwater facilities were analyzed by PB’s Engineering staff. City of Hillsboro, Tualatin Valley Water District (TVWD) and Clean Water Services (CWS) all have adequate capacity with existing system. Critical feature with storm water is to make sure it works well with the existing environmental conditions.

**Private Infrastructure**

NW Natural, Verizon, and Comcast serve the planning area now and will continue to do so with future development.

**Environmental**

The environmental report was written by SWCA. They conducted an audit of the existing conditions for wetlands, vegetation and wildlife habitat and fish resources. SWCA recommends maintaining a wide, undisturbed wetland and riparian corridor along Bronson Creek when the site is developed, and preserving the large forested area in the south part of the overall site, since it provides an important habitat area for wildlife using the Beaverton Creek and Bronson Creek riparian corridors.

4. **Overview of Stakeholder Interviews**

Dave Leland explained the stakeholder interview process. The process uses an Urban Land Institute (ULI) methodology that Leland Consulting Group has used for many years. Mr. Leland noted that they conducted 60 – 80 confidential interviews. They were looking for patterns of concern that would create obstacles to development of the area. Throughout the interview process confidentiality was respected. In Mr. Leland’s group he tested a vision - a new paradigm of development. There are two major property owners: OHSU and Principal Group Financial that hold a large amount of vacant land. Other stakeholders and residents were interviewed as well. The goal of the project is to create a special place. Mr. Leland gave the stakeholders that he interviewed a chance to push back on the thesis he presented, Town Center transformed into a
Regional Center. The following is a synopsis of the PowerPoint presentation that Mr. Leland presented.

**Why Here, Why Now?**
- Right place access to employment
- Retail variety & strength
- Extensive housing base

**Demographics**
- One and two person households
- Two income; educated; foreign

**Right Time**
- Several large property owners (not developers though) who are ready to move
- Several vacant or undeveloped parcels
- Recycle buildings
- Capital is ready

**Overall Reaction**
- Enthusiastic generally – public and private entities
- Some reservations about timing

**Place Making Challenges**
- Demographics are right
- What will draw people to this area?

**Site Control**
- Due to large holdings by one or two owners
- Purchasers have strength to go forward
- Primate Center stays
- Compatibility and buffering necessary

**Housing**
- Costs are a challenge – structured parking
- Will people pay a premium price to live here?
- Work force housing needed
- Need the right mix of uses

**Housing For Sale**
- Demographics, employment
- Interest rates may become an issue if they increase
- Need capable developers

**Housing for Rent**
- Need big jump in rents
- 50% - 60% of rentals are gained by people driving by the complex
• Local economics favor for sale housing

Office/Employment
• 7,000 new employees with Kaiser Permanente and Standard Insurance
• OHSU spin-offs create employment
• Rent premium for high density, mixed-use

Retail
• Streets at Tanasbourne
• Use retail to create a place

Transportation
• Insufficient connectivity
• High quality pedestrian environment

Open Space
• Need major park, lake, civic spaces
• Bronson Creek

Miscellaneous Amenities
• Sports/Athletic Club
• Hotel
• PCC

Political/Leadership
Hillsboro – concern over changing of the guard
Beyond Hillsboro – champions for the project are needed
Need public/private partnerships

Tools
• SDCs
• Urban Renewal
• LID
• State financing

Proving the Market for the Vision
• Built-in problems with a market study
• Market study – what you can get
• Market strategy – what you want
• Need to educate the market

Value Proposition
• Shared plan; partners; long-term commitment
• Halt to land sales to lock down strategy
**Implementation**

- MOU
- New entitlements from the City of Hillsboro

**5. Discussion**

Neisha Cameron, 206th Avenue resident said she was excited about the planning process for this area. She said she could see lots of opportunity with amenities. Her neighbors are concerned about connectivity. Schools are another issue and what types of housing will locate here?

Charles Fleisher, Planning Commissioner, said it looked like a complicated area speaking as an architect and a planner. Speaking as a Planning Commissioner he said he was excited about the planning process and supports the necessary changes proposed to achieve the vision.

Marvin Lamascus, Superblock resident is concerned with livability, quality of life and sustainability. He lives and works in the area. He said he is concerned with traffic, collector routes, and Walker Road (needs to be expanded to five lanes).

Stephen Cook, small landowner, said he has lived in the area for 31 years. He said there have been past developments that were really bad but recent developments have been for the good. He wants to support the plan, it looks good. Stephen said that he would like to see the woods on his property become a part of the Bronson Creek natural area, providing a connection to the Tri-Met station. He would like to see this area stay pristine and wooded. It could act as a buffer, possibly have a water amenity.

Bruce Fong, Kaiser Permanente, has worked for Kaiser for 20 years. Kaiser bought the land in Tanasbourne just before he started working for them. The new hospital will employ approximately 2,000 people. Kaiser has been planning for this hospital for 20 years. Bruce mentioned support for providing work force housing.

Brian Pearce, Unico, said he is the property manager for LaSalle Investments. He is interested in work force housing as well.

Frank Parisi, representing Principal Financial Group, said he thinks he has talked Principal Financial into not selling any more property. Frank said that sooner or later a market strategy needs to be done because developers for this area may not be from Oregon. He mentioned that banks willingness to lend is very pessimistic. Need a grand amenity to draw people to this area.

Dave Leland said as density increases one can get more open space and create an amenity.

Betsy Murphy, Streets of Tanasbourne, said she is supportive of anything that brings more people to the area. Currently, the Streets of Tanasbourne has a diverse customer base. She supports affordable housing for the work force that works in the stores. Brooks asked if there was room at the Streets of Tanasbourne for additional retail. Betsy said no they have run out of space. She said that the Streets of Tanasbourne is more than a place to shop, it’s a place to meet friends, have lunch, hang out with the kids, etc.
Jay Kenton, Oregon University System (OUS), said that OUS is not working where it is currently located. Jay said he was encouraged by the timeline of the project.

Craig Ramey, Regency Centers, said they have made significant investment in Hillsboro, made cash investments. Craig said they have a high interest in expanding their holdings in the area.

Larry Simonsmeier, OHSU, said that this is an exciting opportunity. Need to keep the Primate Center where it is. Larry said there may be internal angst over the changes. It is critical that spin-off companies (start-ups) can move in. They will need wet lab space for 4 – 5 biotech companies. Larry said that we should talk to Dan Dorsa regarding the biotech companies and their needs.

Brad Farmer, Parr Lumber, said he has mixed emotions, hard to see where Parr Lumber fits in. He sees potential conflict. Brooks said existing uses will be accommodated.

Tom Bard, SKB, said they bought nine buildings from Principal Financial strictly for investment purposes. The buildings were one-third vacant when they bought them (value added investment). He said that they are hopeful the absorption they anticipated will happen. Job creation is key; Intel is a major employer but there is a need to diversify industry so as not to be solely dependent on one aspect of the high tech industry. Gerding Edlen and Homer Williams would be good developers for this area. SKB does not want to be long-term holders, they would like to sell their interests within three to five years.

Katie Eyre, Planning Commissioner, said that it is critical to have one center from the sunset corridor to the light rail. We need a celebration of what is west of Portland, needs to be great. Transportation issues are critical, look at main streets to get into this area. Katie also mentioned economic incentives such as state funding and that we have a chicken and egg situation. She stated we also need housing for aging folks as well as amenities that these folks might need. Emergency services are important as well, including possible private funding for a fire station and equipment.

A question was raised regarding the level of support from elected officials. Brooks said he felt the support is there.

5. Next Steps
Mr. Brooks explained that an open house will be held on August 21st to introduce the public to the project. Following that on August 24th and 25th there will be a charette with the steering committee members and select members of the TAC to create the land use alternatives. An invitation letter for the charette will be sent out next week. In September and October, the land use alternatives will be analyzed. In November the plan will be finalized. The implementation strategy following this planning process is currently unfunded.
OHSU/AmbertGlen Area Plan
Steering Committee Meeting

Wednesday August 30, 2006
4:00 p.m.

Hillsboro Civic Center
Room 113B and C
150 E. Main Street

AGENDA

I. Introductions

II. Discuss the two alternatives created during the Charrette

III. Gather input on the two alternatives

IV. Next steps

V. Adjourn
OHSU/AmberGlen Area Plan
Steering Committee Meeting

Wednesday November 15, 2006
4:00 p.m.

Hillsboro Civic Center
Room 113B and C
150 E. Main Street

AGENDA

I. Introduction & Updates
II. Planning Process Review
III. Concept Plan Refinement
IV. Preliminary Development Program
V. Concept Plan Analysis
   • Transportation
   • Infrastructure and Public Services
VI. Discussion of Concept Plan
VII. Next steps
VIII. Adjourn
Members Present
Neshia Cameron, Resident of 206th Avenue residential area
Stephen Cook, Small landowner
Dan Dorsa, OHSU, Vice President for Research
Katie Eyre, City Of Hillsboro, Planning Commissioner
Charles Fleisher, City of Hillsboro, Planning Commissioner
Bruce Fong, Kaiser Permanente, Project Director Westside Medical Center
Jay Kenton, Oregon University System, Vice Chancellor Finance & Administration
Marvin Lamascus, Representative from the Superblock
Marilyn Lanier, OHSU, Vice Provost for West Campus
Randy McEwen, PCC, Vice President Administrative Services
Frank Parisi, Principal Financial Group

Project Team Members Present
Wink Brooks, City of Hillsboro, Planning Director
Brian Campbell, PB PlaceMaking
Kimi Iboshi-Sloop, PB PlaceMaking
Dave Leland, Leland Consulting Group
Paul Morris, PB PlaceMaking
Dan Rutzick, City of Hillsboro, Urban Planner I
Dan Seeman, Kettelson & Associates
Brian Vanneman, Leland Consulting Group

1. Introductions
Hillsboro Planning Director Wink Brooks welcomed the Steering Committee (SC) members and thanked them for participating in the OHSU/AmberGlen Area planning process. The SC members, City of Hillsboro staff, and project team members introduced themselves to everyone in attendance.

Wink Brooks mentioned the September 1, 2006 Argus newspaper article distributed to SC members entitled “City plans could transform Tanasbourne district.” Brooks also mentioned the Hillsboro City Council’s general support for the developing OHSU/AmberGlen Concept Plan.

Brian Campbell of PB PlaceMaking provided the agenda for the Analysis and Revision to the OHSU/AmberGlen Concept Plan PowerPoint.

- Introduction & Updates
- Review of Planning Process
- Concept Plan Refinement
- Preliminary Development Program
2. Review of Planning Process to Date
Brian Campbell discussed the OHSU/AmberGlen planning process steps to date. These steps involved stakeholder interviews, existing conditions reports, a charrette helping to shape a preliminary Concept Plan, a preliminary development program, analysis of the preliminary Concept Plan, and recently revised Concept Plan.

3. Concept Plan Refinement
Brian Campbell stated that the OHSU primate center will remain indefinitely. Consequently, the revised Concept Plan no longer includes the roadway cross connections through the OHSU property. Mixed use would be allowed in all Area Plan districts except for the OHSU commercial/research area.

Campbell specified the draft land use mix percentages assigned to the ten district parcels. Several blocks within the Quatama district have been rearranged as medium density urban. An increased variety of development types have been planned around Willow Creek.

DISCUSSION:
Dan Dorsa thanked the project team for accommodating OHSU by removing the planned roadway cross connections through OHSU property. Dorsa mentioned an ongoing OHSU sponsored study regarding buffering areas between the OHSU property and the surrounding Area Plan districts.

4. Preliminary Development Program
Brian Vanneman of Leland Consulting Group discussed the Methodology involved in:
- Creating a design concept
- Defining districts and parcels
- Selecting development types
- Establishing project phasing
  - Site-wide development program
  - A quantitative and narrative description
  - Vision description using numbers
  - Further refinement of program
  - Basis for future analysis
  - Program drivers

Vanneman detailed the characteristics of the design concept, such as the development of a single main urban activity center, mixed-used emphasis with dominant residential component, as well as incorporating “urban green” design features. The Concept Plan is divided into ten districts.
These districts are further divided into parcels. District units were selected to reflect the different emphases within a site, inform the Development Program, and to facilitate such analysis as traffic modeling and phasing. The smaller parcel units were selected to facilitate a higher level of site analysis.

Brian Vanneman provided several examples of medium and high density development comparables around the country. Analysis of these developments assisted in adjusting land use mix, parking, FAR, building heights, and residential density for the Concept Plan.

Vanneman articulated the twenty-plus year phasing strategy for the Concept Plan’s various districts. The highest number of Concept Plan residential units would be located in the East and West Park districts. The Urban Activity Center would be the district with the highest square footage of retail. The West Park would receive the highest amount of structured parking square footage. The majority of residential development would be constructed between the 5th and 15th years of the Development Program.

Brian Vanneman emphasized the Area Plan’s Development Program vision would incorporate mixed use, early catalyst development, intense residential development, an urban activity center, a variety of districts, connectivity, flexibility, all resulting in the OHSU/AmberGlen area as regional landmark.

**DISCUSSION:**
Wink Brooks stated that every block in the Area Plan will allow for office use. Brooks stated that the flexibility should exist for the market to select office locations as long as caps exist on office use. Brian Campbell reinforced that zoning should be flexible and should consider intensity and density of use. Dan Seeman inquired whether more specific zoning recommendations for each district should be set. Paul Morris specified that Phase II – Project Implementation would clarify zoning details. Brooks stated that fixing zoning now may create less flexibility later. Dave Leland stated that the Plan should maintain flexibility in zoning. Leland articulated that if regulatory tools appropriately protect the public interest, then the level of control could be higher at the private level than the public level. Randy McEwan stated that he was under the impression that several weeks ago Hillsboro’s mayor spoke of more development control and a strong adherence to the city’s vision—in effect a development moratorium. Morris stated that form-based parameters will help protect flexibility and compatibility and keep the Area Plan true to intent. Leland commented that strictly fixing land use was naïve and that the market needed the ability to adjust to meet demand.

Jay Kenton inquired whether the Area Plan’s eastern edge is not a fundamentally different place than the Area Plan’s western side. Paul Morris stated that the 185th Avenue area will not be developed identical to the Area Plan’s west side. Morris predicted that the area will be built out in a different form and character and be highly informed by the close proximity to the Rock Creek campus and 185th Avenue. Morris said that the 185th area of the Concept Plan will be more of an enclave. Morris added that the greater the development of environmental and neighborhood characteristics in the Area Plan the better. Jay Kenton specified that no mention of PCC, OHSU, or OUS in influencing the 185th area of the plan. Charles Fleischer stated that Area Plan’s 185th corridor takes away from focus of central park area because the areas are completely
different. Brian Campbell said that this area’s existing medium density can be integrated with
other uses to create more of a neighborhood feel and provide an opportunity for the area to
prosper. Wink Brooks stated that the Concept Plan’s emphasis is on the Area Plan’s west.
Brooks reinforced the importance of planning for the possible integration of the 185th Avenue
area if OHSU property were to sell. Morris added that this would protect future opportunity and
the sense of neighborhood feel. Bruce Fong asked about the medium density transition area near
185th Avenue and whether the rezoning of 185th corridor would negatively impact west side
development. Morris replied that the eastern edge could contribute to Area Plan enhancements
overall due to general improvements and impact fees. Dave Leland stated that the relationship
between the eastern and western sections is not apparent on the ground because they appear as
two distinct places. Portions of Area Plan property may have to allow economics of the
marketplace to determine when to add buildings/height/parking structures to the 185th area.
Leland said that this would preserve the opportunity for good planning. Katie Eyre stated that
the eastern part of the Area Plan does not have to be a separate community but really a gateway
introduction to the City of Hillsboro, especially if Walker Street were connected. Eyre said that
the eastern edge can still become blended with other Area Plan districts.

Marilyn Lanier stated that the OGI campus is transitioning so it will not automatically be
developable in the near term. Brian Campbell replied that the east park neighborhood is not
proposed to be developable within the first five years. Brian Vanneman added that members
should assume that things will take quite a while to develop.

Jay Kenton recommended that the OHSU/AmberGlen Area Plan map that was divided into
districts and parcels needs a legend connecting each district to its assigned letter (ie. - J stands for
the North Park Employment district, B stands for the Urban Activity Center district).

Paul Morris stated that successful precedent exists for medium and high density within the
OHSU/AmberGlen Area Plan. Other developments have struggled with too much office.

Charles Fleischer stated the need to differentiate between development types Neighborhood
Center I & Neighborhood Center II.

Bruce Fong asked if District B - Urban Activity Center was more important that District F - East
Park. Paul Morris replied that no site is more important than another but will likely be more
developed over time.

Brian Vanneman said that District B - Urban Activity Center will try to mirror the Streets of
Tanasbourne.

Paul Morris said that the November 15th Analysis and Revision of the Concept Plan PowerPoint
presentation would be provided in PDF form to Steering Committee members.

Charles Fleischer stated that the project team had only provided a single scenario for the Area
Plan. Fleischer inquired about presenting other scenarios for the Area Plan. Wink Brooks stated
that the project team is testing the limits of a range of variables collectively. Paul Morris said
that the project team is trying to define ultimate build out potential by examining carrying
capacity, traffic capacity, potential revenue streams, market forces, existing conditions and impact analysis reports. Brian Campbell articulated that the results will be documented in a narrative for the final plan. Campbell said that the project team is trying to be representative not predictive.

Bruce Fong asked how the Area Plan would place cap limits on commercial, residential, and other build out. Wink Brooks stated that the Steering Committee will discuss this during Phase II – Project Implementation. Dave Leland said that a project this big will go through changes and get refined, but concept and principles will continue. Charles Fleischer stated that Area Plan worst case scenarios should be considered. Paul Morris articulated that the overall concept has to be considered.

Transportation Analysis
Dan Seeman of Kittelson & Associates discussed the details of the Concept Plan’s transportation analysis. Seeman stated the need to connect roads within and outside the Area Plan. 205th Avenue to Stucki Avenue would serve as a five lane north/south spine assisted by smaller parallel collectors. Cornell Road would continue as an east/west five lane arterial. Strong existing east/west flow and site generated traffic creates a need for continuity between east/west arterials. High density and mixed use provides increased walking opportunities between uses rather than vehicle trips. Relative close proximity to MAX lines will also contribute to vehicle trip reduction.

Seeman stated that 3.4 million square feet of development exists on the ground today. As these densities are carried forward, roughly 6 million square feet at build-out could be expected under the existing zoning. With the proposed zoning and development program, a total of 9.4 million square feet of overall development is estimated. The result would be 2 or 3 thousand new vehicle trips generated per day.

Seeman worked with County traffic modeling staff to perform sensitivity modeling on trip rates in Portland and Hillsboro based upon use of the Metro traffic model. County staff has recommended use of a “Westside Average” trip rate for housing and employment, which reflects a blend of reduced vehicular trip rates indicative of Downtown Portland blended with higher vehicular trip rates indicative of the suburban areas. Use of the Westside Average trip rates on projected housing and employment figures for the study area results in an estimated reduction in trip rates when compared to the greater Hillsboro’s average, for this unique higher density mixed use area of approximately 16% for residential trips and 10% for employment related trips. Seeman stated that 15,000 trips were generated in the study area during the peak two-hour period (defined as the peak hour and half hour on either side), or roughly 8,000 trips in a single peak hour.

Traffic models were run for 2005 and 2030. Results at this point are highly preliminary and are limited to model plots depicting link and intersection volume to capacity ratios. No detailed intersection reviews have been completed to date, so these findings are subject to detailed work necessary to validate results.
The 2005 model results highlighted the significance of the east/west streets. US-26 is at capacity east of 185th Avenue and Walker, Cornell and Baseline Roads are at capacity near 185th Avenue. Of the north/south arterials, the 185th Avenue intersections are at capacity from Baseline Road to US-26, 205th Avenue south of the site is at capacity. The other north/south arterials currently have sufficient capacity.

Seeman discussed the 2030 traffic forecast with OHSU/AmberGlen build-out. TSP planned improvements within the OHSU/AmberGlen Area build-out include an extension of 173rd Avenue to provide more connectivity over the Sunset Highway and to help relieve 158th Avenue and 185th Avenue. In addition, connecting Walker Road to Amberwood Drive would add east/west capacity in the subarea. Widening east of the subarea would not be sufficient because substantial traffic demand is projected through the subarea as well. In order to provide circulation throughout the subarea, Stucki Avenue, AmberGlen Parkway, and 205th Avenue may need to be upgraded to a north/south arterial to relieve 185th Avenue. These upgrades would likely need to be supported by potential split-diamond interchange improvements at US-26.

The 2030 traffic model did not assume significant increases in transportation system capacity within and around the OHSU/AmberGlen subarea. The 2030 traffic model results with TSP Network and OHSU/AmberGlen build-out provide insights into east/west streets and north/south arterials. Forecasts for east/west streets indicate that improvements to Walker’s connectivity would help to reduce the traffic volumes on Cornell Road. Walker and Cornell Roads are forecasted to be at capacity east of the site. The westbound US-26 off-ramp at 185th Avenue would be at capacity and Baseline Road is forecast to have surplus capacity.

Forecasts for north/south arterials indicate that the 185th Avenue intersections will be at or over capacity north of Cornell Road. Northbound 185th Avenue will be at capacity between Evergreen Parkway and US-26 (even though the 173rd Avenue overpass would directly relieve 185th Avenue). Cornelius Pass Road, 206th Avenue, and Stucki Avenue would have surplus capacity assuming Cornelius Pass Road is improved to a 5-lane configuration south to TV Highway.

DISCUSSION:
Charles Fleischer asked about the benefit of the one-way couplet around the central park area. Paul Morris replied that narrower streets on each side of the park would benefit pedestrians.

Charles Fleischer inquired that while traffic models have analyzed the area north of the Area Plan, would not analyzing areas to the south also be useful? For example Kaiser is located towards the south. Wink Brooks replied that the southbound demand will be minimized by five lane road. Dan Seeman stated that it is important to consider the larger transportation system beyond the boundaries of the site to understand the true impact of a development of this magnitude.

Jay Kenton asked whether the 2030 traffic modeling accounted for roadway cross connections through the OHSU property. Dan Seeman replied that the modeling did account for the roadway cross connections through the OHSU property and would be doing more modeling without these
5. **Other Infrastructure & Services Analysis**

Brian Campbell spoke briefly of the final existing condition reports and draft impact analysis reports on:

- Water and Sewer Facilities
- Storm Drainage Facilities
- Environmental
- Transportation
- Public Facilities

Brian Campbell stated that the onsite sewer system presumes 8 to 15-inch gravity flow lines connecting to a 27-inch trunk line to Bronson Creek (running diagonally through the site.)

Campbell stated that the Transportation and Public Services sections of the Concept Plan’s draft impact analysis reports are not yet complete. Mention was made of the existing environmental conditions and recently completed impact analysis.

Campbell discussed the OHSU/AmberGlen school capacity impacts. About 920 new K-12 students are projected at build out.

*DISCUSSION:*

Marvin Lamascus inquired about the Beaverton school district’s plans for serving the Area Plan. Brian Campbell said that an opportunity existed for a multi-story urban school building with enough capacity for the predicted students.

### 6. Update from earlier TAC meeting

Wink Brooks spoke of major issues from the TAC meeting earlier in the day. Major issues included:

- adequacy of Area Plan parking
- whether a circulator was still in the plan
- the importance of good bike paths
- access connections to county arterials
- ODOT concerns regarding compliance issues with the Transportation Planning Rule to show how improvements will be funded because TSP has unfunded elements
- ODOT concerns over split diamond interchange and the affect on an adjacent apartment complex
- negative traffic impacts of not creating a street through the OHSU campus
- allowing institutional uses on any block
- strategy for an environmental mitigation master plan to pre-certify area for development

*DISCUSSION:*
Dave Leland had concerns over a strategy for an environmental mitigation master plan to pre-certify area for development because the results could be mutually unbeneificial.

Katie Eyre added that institutional places should be for both public and private. Eyre stated that the central park area could serve as playfields for an urban school.

7. **Affirmation of Revised Concept Plan**

Wink Brooks received a general affirmation of the direction of the revised OHSU/AmberGlen Concept Plan from the Steering Committee. Frank Parisi said that he is enthusiastic about the Concept Plan but warns that there is a point when a project no longer makes financial sense. Parisi said that every element needs to be researched. Parisi suggested that a base conditions map be overlaid with the concept plan in order to understand potential land trade-offs and to verify that roads are not running through existing structures. Parisi stated that such measures would facilitate the market study and locating developers.

8. **Next Steps – Schedule & Implementation**

Brian Campbell discussed project next steps. These next steps include finalizing the concept plan and impact reports, as well as preparing for Project Implementation in Phase II. Brian stated that all draft impact reports would be provided to Steering Committee members by December 1st, 2006 except for the supplemental transportation report in January 2007. Steering Committee members should respond with comments to the draft impact reports and Concept Plan by December 15th, 2006. The final Phase I Steering Committee meeting would be held on January 31st, 2007. Phase II - Project Implementation will occur between 2007 and 2008.
REVISED AGENDA

I. Introductions
II. Project Description, Process and Schedule
III. Overview of Existing Conditions
   • Transportation
   • Infrastructure
   • Environmental
   • Other Services
IV. Overview of Stakeholder Interviews
V. Discussion
VI. Next steps
VII. Adjourn
Members Present

Kevin Smith, City Of Hillsboro, Development Manager – Parks & Recreation
Dave Foster, City of Hillsboro, Fire Inspector, Fire Department
John Specht, City of Hillsboro, Police Lieutenant, Police Department
Marah Danielson, ODOT, Associate Planner
Jerry Green, Beaverton School District, Administration for Facilities, Operation & Maintenance
Gregg Leion, Washington County, Planning Division, Senior Planner
Jillian Detweiller, Tri-Met, Land Development Planner
Tim O’Brien, Metro, Senior Regional Planner
Miranda Bateschell, Metro (alternate), Assistant Regional Planner
Carrie Pak, Clean Water Services, Engineering Division Manager
Meg Fernekees, Department Of Land Conservation & Development, Portland Metro Area
Regional Representative
Marilyn Lanier, OHSU, Vice Provost for West Campus
Ali Sadri, OHSU, Interim Assistant Director, Maintenance, Construction & Contracts

Project Team Members Present
Brian Campbell, PB PlaceMaking
Dave Leland, Leland Consulting Group
Wink Brooks, City of Hillsboro, Planning Director
Karla Antonini, City of Hillsboro, Senior Planner
Doug Miller, City of Hillsboro, Urban Planner II

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individual developments. Future land uses should complement each other and provide
excellent access to employment and transportation Build a community not separate
projects
3) Create strategies for public/private partnerships
4) Adopt specific measures to make the area a success

Mr. Campbell briefly described the objectives of the planning project:

1) Understand the area’s position in and impact on the market

2) Building a community, not separate projects

3) Create a pedestrian friendly place, critical to using multi-modal options

4) Optimize connectivity

5) Stress results over regulation

6) Create a critical mass of mixed-use development for an active 18-hour center

Mr. Campbell then discussed the schedule and work tasks of the project. He noted that the
planning effort would be completed by the end of November. He then discussed the phases and
work tasks of the project. Phase I: Strategy and Reconnaissance includes work tasks 1 through 5.
The purpose of this phase is to understand the expectations of Metro, City of Hillsboro and other
jurisdictions for the area as well as the future development plans for each major stakeholder. The
consultants have conducted most of the stakeholder interviews. Potential links to the greater
Tanasbourne area will be reviewed during this phase as well as identifying potential
implementation strategies. Existing condition reports for the planning area are in draft form and
will be distributed next week. Mr. Campbell noted that the existing conditions, especially
transportation, will be critical in this planning effort.

Mr. Campbell explained Phase II: Physical Planning which includes work tasks 6 and 7. The
purpose of this phase is to create two alternatives that will be created during a design workshop
(charette) where participants create a variety of land use and design concepts for the area. It will
be important to consider all infrastructure issues at this time. We will be inviting all steering
committee members and some TAC members to the charette on August 24th. An open house will
occur on October 9th to inform the public on the planning process thus far and present the two
alternative concept plans that were created. Refinement of the concept plan will be completed by
the end of October. The product for work task 7 is the final area plan and report which is
expected to be completed by the end of November. Throughout the planning process the City
Council and Planning Commission will be kept informed through work sessions.

Mr. Campbell noted that Phase III: Implementation is not part of the work program. It is the key
piece that is missing. There is an assumption that private stakeholders will agree to pay for
implementation.
Jillian Detweiler, Tri-Met representative asked if she could be included in the charette process as they are a landowner as well. Mr. Brooks stated Tri-Met would be added to the invitation list.

3. **Overview of Existing Conditions**

Mr. Campbell noted that the consultant team has completed rough drafts of the existing conditions reports. The information presented today is not in final form. He reiterated that the existing conditions reports will be sent out early next week and asked that the TAC review the reports and provide feedback to the consultant team and the City so that final existing conditions reports can be completed.

**Traffic / Transportation**

Mr. Campbell reviewed Kittelson’s analysis of existing transportation conditions. East/west and north/south connections are important to provide adequate traffic circulation. Cornelius Pass is currently technically over capacity. Walker Road, 185th, and 206th will be over capacity by 2020. Need creative solutions are needed. Non-auto transportation alternative will be important. Hillsboro’s TSP addresses many of the issues identified but many of the proposed solutions are unfunded.

Marah Danielson, ODOT representative said the transportation summary did not reflect a look at the Hwy 26 interchange. Dan Seeman with Kittelson was tasked to look at the impact of development on that interchange.

A question was raised about increased residential and commercial density, which could be substantial. The City’s Transportation System Plan (TSP) included increases in employment using existing assumptions to 2020, but did not account for additional residential growth. Non-auto internal trip opportunities may be necessary.

**Public Infrastructure**

Existing water, sewer and stormwater facilities were analyzed by PB’s Engineering staff. City of Hillsboro, Tualatin Valley Water District (TVWD) and Clean Water Services (CWS) all have adequate capacity with existing system. Critical feature with storm water is to make sure it works well with the existing environmental conditions.

**Private Infrastructure**

NW Natural, Verizon, and Comcast serve the planning area now and will continue to do so with future development.

**Environmental**

The environmental report was written by SWCA. They conducted an audit of the existing conditions for wetlands, vegetation and wildlife habitat and fish resources. SWCA recommends maintaining a wide, undisturbed wetland and riparian corridor along Bronson Creek when the site is developed, and preserving the large forested area in the south part of the overall site, since it provides an important habitat area for wildlife using the Beaverton Creek and Bronson Creek riparian corridors.
Jerry Green, Beaverton School District representative wanted to know where the schools piece was. Mr. Campbell noted that Karla Antonini will be writing that piece as well as police, fire and library existing condition reports.

4. **Overview of Stakeholder Interviews**

Dave Leland explained the stakeholder interview process. The process uses an Urban Land Institute (ULI) methodology that Leland Consulting Group has used for many years. Mr. Leland noted that they conducted 60 – 80 confidential interviews. They were looking for patterns of concern that would create obstacles to development of the area. Throughout the interview process confidentiality was respected. In Mr. Leland’s group he tested a vision - a new paradigm of development. There are two major property owners: OHSU and Principal Group Financial that hold a large amount of vacant land. Other stakeholders and residents were interviewed as well. The goal of the project is to create a special place. Mr. Leland gave the stakeholders that he interviewed a chance to push back on the thesis he presented, Town Center transformed into a Regional Center. The following is a synopsis of the PowerPoint presentation that Mr. Leland presented.

**Why Here, Why Now?**
- Right place access to employment
- Retail variety & strength
- Extensive housing base

**Demographics**
- One and two person households
- Two income; educated; foreign

**Right Time**
- Several large property owners (not developers though) who are ready to move
- Several vacant or undeveloped parcels
- Recycle buildings
- Capital is ready

**Overall Reaction**
- Enthusiastic generally – public and private entities
- Some reservations about timing

**Place Making Challenges**
- Demographics are right
- What will draw people to this area?

**Site Control**
- Due to large holdings by one or two owners
- Purchasers have strength to go forward
- Primate Center stays
- Compatibility and buffering necessary
Housing
• Costs are a challenge – structured parking
• Will people pay a premium price to live here?
• Work force housing needed
• Need the right mix of uses

Housing For Sale
• Demographics, employment
• Interest rates may become an issue if they increase
• Need capable developers

Housing For Rent
• Need big jump in rents
• 50% - 60% of rentals are gained by people driving by the complex
• Local economics favor for sale housing

Office/Employment
• 7,000 new employees with Kaiser Permanente and Standard Insurance
• OHSU spin-offs create employment
• Rent premium for high density, mixed-use

Retail
• Streets at Tanasbourne
• Use retail to create a place

Transportation
• Insufficient connectivity
• High quality pedestrian environment

Open Space
• Need major park, lake, civic spaces
• Bronson Creek

Miscellaneous Amenities
• Sports/Athletic Club
• Hotel
• PCC

Political/Leadership
Hillsboro – concern over changing of the guard
Beyond Hillsboro – champions for the project are needed
Need public/private partnerships

Tools
• SDCs
• Urban Renewal
• LID
• State financing

Proving the Market for the Vision
• Built-in problems with a market study
• Market study – what you can get
• Market strategy – what you want
• Need to educate the market

Value Proposition
• Shared plan; partners; long-term commitment
• Halt to land sales to lock down strategy

Implementation
• MOU
• New entitlements from the City of Hillsboro

5. Discussion

Tim O’Brien, Metro representative asked about the new center designation (the vision for this area) – what kind of impact would that have on the Downtown Regional Center? Mr. Brooks responded that the Tanasbourne Town Center is a town center on steroids. Tanasbourne does not connect directly to light rail it could never be a regional center. If Tanasbourne now was brought to light rail it could be designated a regional center. Mr. Brooks noted that we are no longer a city focused on the downtown; the city is now made up of several districts. He also noted that more development closer will help the downtown. Mr. Leland said satellite cities are emerging, pulse points of intense development.

Meg Fernekees, DLCD representative believes that there is enough growth to go around. Concerned about infrastructure, will there be enough money to put infrastructure in downtown and in the OHSU/AmblerGlen area?

Mr. Leland mentioned that there are opportunities here and sensitivities. The Primate Center needs to be buffered. The mass of development will need to be built on the west side of OHSU property. You get intense development when values are high. Will need to aggregate properties to preserve open space.

Marah Danielson, ODOT representative asked about the zoning for this area. Brooks said it is Station Community Research Park (OHSU property) and Principal Financial property is zoned Station Community Business Park. Mr. Campbell mentioned that new zoning may be created. The biggest change to the zoning will be allowing residential and retail development.

Gregg Leion, Washington County Planning representative said Washington County is most concerned about roads, the arterial system they want to keep them under their jurisdiction.
Kevin Smith, City of Hillsboro Parks Department representative said if development in this area is really dense the need for open space will increase. He sees an opportunity here to create a park and open space.

Mr. Leland asked if it is legally possible to relocate parts of Bronson Creek? Carrie Pak, CWS’ representative said there are other opportunities to make a lake environment or something else like it. Mr. Campbell mentioned there is an existing pond close to the AmberGlen Business Park. Kevin said that parks are a big draw for residents. Mr. Leland said we need to maintain flexibility. Wink said there are ways to enhance the waterway and it will need to be buffered.

Ali Sadri, OHSU representative is looking forward to connecting the resources, creating a buffer between Primate Center and enhancing the natural resources.

Marilyn Lanier, OHSU representative said they are experiencing growth on the primate side employees as well as animals. OHSU is conducting a site analysis as to how best to protect the Primate Center (need to stay within the 1998 Master Plan). The Master Plan provides the best projection for growth. Mr. Campbell would like to have OHSU projections for charette. Marilyn said to stick with the 1998 CDP for the Primate Center (20-year plan agreement). Karla mentioned that she would get a copy to Mr. Campbell. Marilyn said if the nearby environment shifts, OHSU is willing to adjust.

Carrie Pak, CWS’ representative gave a bit of her background mentioning that she was involved in the Springwater Plan (Gresham site). She said it is important to create an identity to bring the market to the area. She said it would be exciting to combine the practice of low impact development and managing stormwater. This area could be a showcase for water quality, i.e. cistern fed lake. Also worked with the Urban Land Trust to add affordable housing.

Jillian Detweiler, Tri-Met representative is working with Urban Land Trust to create affordable housing and couple that with a reduction in auto use (second largest household investment). She mentioned that safety on enormous arterials is tenuous at best. She would like to see transit expanded in this area. The park and ride at Willow Creek is large in Tri-Met’s portfolio, they have been approached by developers to develop the vacant land there.

Marilyn Lanier said she is impressed with the vision for the area. She mentioned that her stakeholder interview was more open-ended questions rather than a vision being presented to them. Marilyn said that the OGI campus is on the market, with a ten year lease back. OGI would remain there for that time, looking at a combination of education and research.

Miranda Bateschell, Metro representative (alternate) said she is concerned about having competing regional centers like Tim O’Brien mentioned earlier. She is working on the New Look initiative that is looking at tools for investing in our communities. She mentioned that you can have tax increment financing without urban renewal. Miranda asked if we will try form based codes for this area. Mr. Campbell said that we may use performance based codes.

Cliff Munson, City of Hillsboro Fire Department representative mentioned several concerns that the Fire Department may have with increase in population (for example an increase in day-time
population of 10,000 – 15,000 people). Fire services are funded by local option tax. Fire is not currently meeting response time. There is a direct correlation between response time and population. Right now Fire cannot meet increased calls within the response time standards. Cliff mentioned that high-rise developments will require new equipment as Hillsboro does not have high-rise developments. Currently there are three fire stations in town, looking at funding for two more stations. Mr. Leland suggested that you build in the costs for increased fire and police service in the pro-forma. Cliff said the City is looking at a local option tax to fund two new stations. There is no fire station in Tanasbourne area. The Fire Department is strapped for plan review and new construction. The Fire Department struggles with light rail to get access to light rail lines in this area if there were an accident. Mr. Munson suggested that we look at Folsom, California because they experienced a four year jump in population from 15,000 to over 85,000 people. The costs associated with providing fire services were passed on to developers. Ronler Acres fire station was partially funded by Intel. Mr. Munson then gave examples of developments in Hillsboro where providing fire services are a problem: such as Knotting Hill where the streets are too skinny to allow access by fire trucks.

Gregg Leion, Washington County Planning, said local access, connectivity to the site is very important to connect the arterials. We are hitting the capacity of the road system now. He is concerned about accepting complete failure on the arterial network. Congestion lasting so long becomes extremely unacceptable. We need innovative ideas to relieve this congestion, alternate modes are important. The project must also consider emergency services when developing these dense neighborhoods.

Meg Fernekees, DLCD representative said she likes the paradigm change. She likes the idea that this area may take pressure off single family neighborhoods and put the density here.

5. Next Steps
Mr. Brooks explained that an open house will be held on August 21st to introduce the public to the project. Following that on August 24th and 25th there will be a charrette with the steering committee members and select members of the TAC to create the land use alternatives. In September and October, the land use alternatives will be analyzed. In November the plan will be finalized. The implementation strategy for this planning effort is currently unfunded.
AGENDA

I. Introductions

II. Discuss the two alternatives created during the Charrette

III. Gather input on the two alternatives

IV. Next steps

V. Adjourn
OHSU/AmberGlen Area Plan
Technical Advisory Committee Meeting

Wednesday November 15, 2006
1:30 p.m.

Hillsboro Civic Center
Room 113B and C
150 E. Main Street

AGENDA

I. Introduction & Updates
II. Planning process review
III. Concept Plan refinement
IV. Preliminary Development Program
V. Concept Plan Analysis
   • Transportation
   • Infrastructure and Public Services
VI. Discussion of Concept Plan
VII. Next steps
VIII. Adjourn
Members Present
Marah Danielson, ODOT, Land Use & Transportation Planning Unit, Associate Planner
Jillian Detweiller, Tri-Met, Land Development Planner
Dave Foster, City of Hillsboro, Fire Department, Fire Inspector
Karen Frost, Westside Transportation Alliance
Roy Gibson, City of Hillsboro, Public Works Director
Steve L. Kelley, Washington County, Planning Division, Senior Planner
Gregg Leion, Washington County, Planning Division, Senior Planner
Tim O’Brien, Metro, Senior Regional Planner
Carrie Pak, Clean Water Services, Engineering Division Manager
Gary Pippin, Tualatin Valley Water District, District Engineer
John Rinier, City of Hillsboro, Fire Marshal
Ali Sadri, OHSU, Maintenance, Construction & Contracts, Interim Assistant Director
Kevin Smith, City of Hillsboro, Parks & Recreation, Development Manager
John Specht, City of Hillsboro, Police Lieutenant
Dick Steinbrugge, Beaverton School District
Kristin Udvari, Ball Janik LLP, Attorney
Joe Vandecoevering, Verizon

Project Team Members Present
Wink Brooks, City of Hillsboro, Planning Director
Brian Campbell, PB PlaceMaking
Kimi Iboshi-Sloop, PB PlaceMaking
Paul Morris, PB PlaceMaking
Don Odermott, City of Hillsboro, Transportation Planning Engineer
Dan Rutzick, City of Hillsboro, Urban Planner I
Dan Seeman, Kittelson & Associates
Brian Vanneman, Leland Consulting Group

1. Introductions
Hillsboro Planning Director Wink Brooks welcomed the Technical Advisory Committee (TAC) members and thanked them for participating in the OHSU/AmberGlen Area planning process. The TAC members, City of Hillsboro staff and project team members introduced themselves.

Wink Brooks mentioned the September 1, 2006 Argus newspaper article distributed to TAC members entitled “City plans could transform Tanasbourne district.” Brooks also mentioned the Hillsboro City Council’s general support for the developing OHSU/AmberGlen Concept Plan.
Brian Campbell of PB PlaceMaking provided the agenda for the Analysis and Revision to the OHSU/AmberGlen Concept Plan PowerPoint.

- Introduction & Updates
- Review of Planning Process
- Concept Plan Refinement
- Preliminary Development Program
- Concept Plan Analysis
  - Transportation
  - Other Infrastructure Services
- Discussion
- Next Steps – Schedule & Implementation

2. **Review of Planning Process to Date**
Brian Campbell discussed the OHSU/AmberGlen planning process steps to date. These steps involved stakeholder interviews, existing conditions reports, a charrette helping to shape a preliminary Concept Plan, a preliminary development program, analysis of the preliminary Concept Plan, and recently revised Concept Plan.

3. **Concept Plan Refinement**
Brian Campbell stated that the OHSU primate center will remain indefinitely. Consequently, the revised Concept Plan no longer includes the roadway cross connections through the OHSU property.

Campbell specified the draft land use mix percentages assigned to the ten district parcels. Several blocks within the Quatama district have been rearranged as medium density urban. An increased variety of development types have been planned around Willow Creek.

**DISCUSSION:**
Jillian Detweiller asked about the shortsightedness of not factoring the OHSU property into long range plans for the OHSU/AmberGlen area as the OHSU property could potentially become available for development in the future. Wink Brooks responded that the project team has acknowledged the importance of considering the future development of the OHSU site and will include relevant information in the Concept Plan final version. Don Odermott added that traffic impact analysis modeling did factor in the proposed OHSU roadway cross connections to address possible traffic implications. Odermott discussed dropping the south connection but maintained that the north connection is still anticipated at some future time when OHSU redevelops east of the creek. Odermott also stated that the traffic analysis would include the OHSU master plan build-out with the north road connection initially with subsequent sensitivity testing evaluating when it would be needed considering the proposed development plans and the OHSU master plan timing.

4. **Preliminary Development Program**
Brian Vanneman of Leland Consulting Group discussed the Methodology involved in:
- Creating a design concept
- Defining districts and parcels
Selecting development types

- Establishing project phasing
  - Site-wide development program
  - A quantitative and narrative description
  - Vision description using numbers
  - Further refinement of program
  - Basis for future analysis
  - Program drivers

Vanneman detailed the characteristics of the design concept, such as the development of a single main urban activity center, mixed-used emphasis with dominant residential component, as well as incorporating “urban green” design features. The Concept Plan is divided into ten districts. These districts are further divided into parcels. District units were selected to reflect the different emphases within a site, inform the Development Program, and facilitate traffic modeling and phasing. The smaller parcel units were selected to facilitate a higher level of site analysis.

Brian Vanneman provided several examples of medium and high density development comparables around the country. Analysis of these developments assisted in adjusting land use mix, parking, FAR, building heights, and residential density for the Concept Plan.

Vanneman articulated the twenty-plus year phasing strategy for the Concept Plan’s various districts. The highest number of Concept Plan residential units would be located in the East and West Park districts. The Urban Activity Center would be the district with the highest square footage of retail. The West Park would receive the highest amount of structured parking square footage. The majority of residential development would be constructed between the 5th and 15th years of the Development Program.

Brian Vanneman emphasized the Area Plan’s Development Program vision would incorporate mixed use, early catalyst development, intense residential development, an urban activity center, a variety of districts, connectivity, flexibility, all resulting in the OHSU/AmberGlen area as a regional landmark.

**DISCUSSION:**

Jillian Detweiller inquired about the developable land area of Tanasbourne and was told the area consisted of 252 net buildable acres.

Jillian Detweiller asked about the difference between Development Type Neighborhood Center I and Neighborhood Center II.

**Transportation Analysis**

Dan Seeman of Kittelson & Associates discussed the details of the Concept Plan’s transportation analysis. Seeman stated the need to connect roads within and outside the Area Plan. 205th Avenue to Stucki Avenue would serve as a five lane north/south spine assisted by smaller parallel collectors. Cornell Road would continue as an east/west five lane arterial. Strong existing east/west flow and site generated traffic creates a need for continuity between east/west
arterials. High density and mixed use provides increased walking opportunities between uses rather than vehicle trips. Relative close proximity to MAX lines will also contribute to vehicle trip reduction.

Seeman stated that 3.4 million square feet of development exists on the ground today. As these densities are carried forward, roughly 6 million square feet at build-out could be expected under the existing zoning. With the proposed zoning and development program, a total of 9.4 million square feet of overall development is estimated. The result would be 2 or 3 thousand new vehicle trips generated per day.

Seeman worked with County traffic modeling staff to perform sensitivity modeling on trip rates in Portland and Hillsboro based upon use of the Metro traffic model. County staff has recommended use of a “Westside Average” trip rate for housing and employment, which reflects a blend of reduced vehicular trip rates indicative of Downtown Portland blended with higher vehicular trip rates indicative of the suburban areas. Use of the Westside Average trip rates on projected housing and employment figures for the study area results in an estimated reduction in trip rates when compared to the greater Hillsboro’s average, for this unique higher density mixed use area of approximately 16% for residential trips and 10% for employment related trips. Seeman stated that 15,000 trips were generated in the study area during the peak two-hour period (defined as the peak hour and half hour on either side), or roughly 8,000 trips in a single peak hour.

Traffic models were run for 2005 and 2030. Results at this point are highly preliminary and are limited to model plots depicting link and intersection volume to capacity ratios. No detailed intersection reviews have been completed to date, so these findings are subject to detailed work necessary to validate results.

The 2005 model results highlighted the significance of the east/west streets. US-26 is at capacity east of 185th Avenue and Walker, Cornell and Baseline Roads are at capacity near 185th Avenue. Of the north/south arterials, the 185th Avenue intersections are at capacity from Baseline Road to US-26, 205th Avenue south of the site is at capacity. The other north/south arterials currently have sufficient capacity.

Seeman discussed the 2030 traffic forecast with OHSU/AmberGlen build-out. TSP planned improvements within the OHSU/AmberGlen Area build-out include an extension of 173rd Avenue to provide more connectivity over the Sunset Highway and to help relieve 158th Avenue and 185th Avenue. In addition, connecting Walker Road to Amberwood Drive would add east/west capacity in the subarea. Widening east of the subarea would not be sufficient because substantial traffic demand is projected through the subarea as well. In order to provide circulation throughout the subarea, Stucki Avenue, AmberGlen Parkway, and 205th Avenue may need to be upgraded to a north/south arterial to relieve 185th Avenue. These upgrades would likely need to be supported by potential split-diamond interchange improvements at US-26.

The 2030 traffic model did not assume significant increases in transportation system capacity within and around the OHSU/AmberGlen subarea. The 2030 traffic model results with TSP Network and OHSU/AmberGlen build-out provide insights into east/west streets and north/south...
arterials. Forecasts for east/west streets indicate that improvements to Walker’s connectivity would help to reduce the traffic volumes on Cornell Road. Walker and Cornell Roads are forecasted to be at capacity east of the site. The westbound US-26 off-ramp at 185th Avenue would be at capacity and Baseline Road is forecast to have surplus capacity.

Forecasts for north/south arterials indicate that the 185th Avenue intersections will be at or over capacity north of Cornell Road. Northbound 185th Avenue will be at capacity between Evergreen Parkway and US-26 (even though the 173rd Avenue overpass would directly relieve 185th Avenue). Cornelius Pass Road, 206th Avenue, and Stucki Avenue would have surplus capacity assuming Cornelius Pass Road is improved to a 5-lane configuration south to TV Highway.

DISCUSSION:
Marah Danielson inquired whether parking ratios had been examined in the traffic modeling. Wink Brooks confirmed that this was the case.
Paul Morris added that forecasted parking would likely fit between suburban and high urban downtown scales.
Dan Seeman emphasized that parking would be found primarily within structured parking. Seeman also stated that the Concept Plan would be promoting multi modal transportation. Jillian Detweiller asked whether the Urban Activity Center district was designated next to Tanasbourne to create synergy. Paul Morris and Wink Brooks concurred and added that the Urban Activity Center would complement the Streets of Tanasbourne.
Carrie Pak questioned the Urban Activity Center district’s placement along the Area Plan’s northern boundary rather than closer to a TriMET MAX station along the southern boundary. Wink Brooks acknowledged the benefit of retail areas near TriMET MAX stations, yet emphasized the lack of arterials along the southern boundary of the OHSU/AmberGlen Area Plan. Paul Morris responded that the Urban Activity Center district along the Area Plan’s northern boundary is appropriately located between zones. If located beside a TriMET MAX station in the Area Plan’s south, then the Urban Activity Center district would be a detrimental distance from the influx of new workplaces emerging north of the Area Plan.
Carrie Pak asked whether Hillsboro would consider a circulator for the OHSU/AmberGlen Area Plan. Wink Brooks responded that the Area Plan has a circulator but Hillsboro may be unable to afford a streetcar or trolley.
Steve L. Kelley commented that the Concept Plan looks “great”, but Kelley reinforced the importance of extensive analysis of transportation forecasts. Kelley also recommended that the proposed roundabouts be studied closely. Furthermore, Steve L. Kelley stated that Baseline and Walker Roads are critical east/west regional routes key to Area Plan circulation. Kelley stated that Walker Road is not currently designed for the increased numbers of Area Plan drivers accessing nearby parking structures. Kelley also raised concern over the need to continue to assume a future east/west connection across OHSU to connect 206th Avenue and AmberGlen Parkway with 185th Avenue between Walker Road and the Light Rail (per both County and City
Karen Frost asked whether the Area Plan would recommend suburban street dimensions for pedestrians. Paul Morris responded that the project team used urban street standards rather than suburban street standards.

Karen Frost inquired whether wider arterials would result in increases in speeding traffic. Wink Brooks added that avoiding a five lane north/south on Stucki Avenue, AmberGlen Parkway and 206th Avenue would be preferable. In addition, one way streets could reduce speeding traffic. Brooks also emphasized the importance of generating an environment for walking and cycling. Tim O’Brien suggested that Metro get involved in classifying roads at a regional level.

Marah Danielson stated that Washington County would likely be unable to assist with funding the necessary transportation improvement work. Researching funding mechanisms for this project will be quite important. Dan Seeman agreed with this comment and acknowledged that funding dollars for transportation improvements were not guaranteed.

Karen Frost inquired whether parking structures would charge for use. Wink Brooks responded that this had not yet been examined.

Marah Danielson said she anticipated more future conversations involving the split diamond concept because a nearby neighborhood could be adversely affected. Don Odermott asserted that this was merely the first round of transportation modeling analysis so was difficult to forecast project implications at this time.

Carrie Pak inquired about receiving full sized graphics of transportation analysis. Don Odermott responded that he would email out the graphics.

5. **Other Infrastructure & Services Analysis**

Brian Campbell spoke briefly of the final existing condition reports and draft impact analysis reports on:

- Water and Sewer Facilities
- Storm Drainage Facilities
- Environmental
- Transportation
- Public Facilities

Brian Campbell stated that the onsite sewer system presumes 8 to 15-inch gravity flow lines connecting to a 27-inch trunk line to Bronson Creek (running diagonally through the site.)
Campbell stated that the Transportation and Public Services sections of the Concept Plan’s draft impact analysis reports are not yet complete. Mention was made of the existing environmental conditions and recently completed impact analysis.

Campbell discussed the OHSU/AmberGlen school capacity impacts. About 920 new K-12 students are projected at build-out.

**DISCUSSION:**

Brian Campbell stated that the proposed 11 million gross square feet of development will create less of an impact on roads, sewer, and water than earlier expected.

Karen Frost recommended that employers could be petitioned to invest in transportation demand management programs. Wink Brooks replied that the project team could suggest to Kaiser and others a transportation demand management program.

Dick Steinbrugge asked if it is safe to assume that school public facilities will be explored further as the Concept Plan becomes finalized. Wink Brooks stated that Brian Campbell and Dick Steinbrugge should discuss school site location and the construction of an urban school. Paul Morris mentioned how institutional uses, such as construction of a new urban school, would serve the public good. Dick Steinbrugge mentioned that the proposed Area Plan’s park green spaces could be double utilized by a nearby school facility.

Jillian Detweiller stated that no mention was made in the Final Existing Condition Reports about the severe absence of bicycle and pedestrian usage in area. Detweiller emphasized the need to include a paragraph on this in the Final Existing Condition Reports. Wink Brooks agreed that this needs to be made more explicit.

Carrie Pak recommended the creation of a mitigation Master Plan for the entire site. She stated that project implementation would be expedited by pre-identifying mitigation sites that could be adversely affected. Wink Brooks agreed with the benefit of pre-certifying for development. Carrie Pac stated that a mitigation Master Plan could make it easier for the development community to do the right thing.

6. **Affirmation of Revised Concept Plan**

Wink Brooks received a general affirmation of the direction of the revised OHSU/AmberGlen Concept Plan from the Technical Advisory Committee.

7. **Next Steps – Schedule & Implementation**

Brian Campbell discussed project next steps. These next steps include finalizing the concept plan and impact reports, as well as preparing for Project Implementation in Phase II. Brian stated that all draft impact reports would be provided to TAC members by December 1st, 2006 except for the supplemental transportation report in January 2007. TAC members should respond with comments to the draft impact reports and Concept Plan by December 15th, 2006.
The final Phase I TAC meeting would be held on January 31st, 2007. Phase II - Project Implementation will occur between 2007 and 2008.
Stakeholders Present

Wink Brooks, City of Hillsboro, Planning Director
Pat Ribellia, City of Hillsboro, Planning Director
Doug Miller, City of Hillsboro, Urban Planner II
Jay Fischer, Principal Financial Group
Frank Parisi, Parisi & Parisi P.C.
Mimi Doukas, WRG Design for Principal Financial Group
Jim Lange, Alpha Community Development for MK Development
Ron Lack, Equastone
Laura Gentry, KG Investment Management
Sean Murphy, Wakefield Capital LLC
Lauren O’Neil, Wakefield Capital LLC
Steve Abel, Stoel, Rives LLP
Ben Williams, WRG Design

After introductions, Wink gave a brief presentation on the purpose of the meeting, and a review of Phase I of the OHSU/AmberGlen Concept Plan.

STAKEHOLDER STATUS REPORTS

Wink asked the stakeholders to discuss the status of their long-term plans for their properties.

Jay Fisher said that in the near term Principal would like to develop on 35 acres with something different. On other sites they would like to have them rezoned so they can redevelop.

Ron Lack of Equastone said they would like to focus on maintaining the current use on their properties and preserve their investment.

Sean Murphy of Wakefield said that the recent closing on their property is simply a sales-leaseback financing option for OHSU. Wakefield is in favor of good/smart development. Wakefield is not planning anything now, but is willing to support the OHSU/AmberGlen Area Plan. He said that Wakefield has a master lease on each property that cannot be terminated until the first seven year period is over.

Jim Lange of Alpha said that MK Development builds apartments/townhouses/condos and would like to develop their site, but the current Research Park zoning is problematic. He said MK is interested in developing smaller buildings than shown in the Plan, but they are open to other ideas.

MOU/WORK PROGRAM
Jay Fisher asked if we should finish the physical layout of the Plan first.

Mimi Doukas said that WRG has drafted a revised Plan that considers the concepts of the original Plan, yet deals with the reality of current uses.

Ben Williams of WRG suggested there might be a need for two MOU’s - one for up-front planning and one for the implementation.

Frank Parisi said that the group should outline future expectations. The level of public funding should be evaluated and if none is available, owners will likely not be able to develop.

Sean Murphy of Wakefield asked if there were any other large scale development in the works nearby. The answer was no.

Pat Ribellia said that he would expect to see something addressing certainty of entitlements from all layers of government – certainly about public funding.

Ron Lack of Equastone said that the owners of vacant land usually pay for infrastructure, but he asked what would happen if market demand does not support development – who would pay for infrastructure? Wink replied that phasing and concurrency would be important.

Mimi Doukas said that Principal would like to protect existing buildings and split up the park areas. The hard part of revising the plan was developing the street network. Land uses were rearranged, but the siting is very flexible.

Frank Parisi said that it needs to be clear that the Stucki extension will occur after Phase I and only at the request of property owners.

Pat Ribellia mentioned that the first Plan went before the Planning Commission and City Council for their support and that the new Plan would need to do the same.

To do list:
- create a roster of all players
- create a roster of missing parties

Chalkboard items:
- Purpose/Fundamental needs should be stated in a document
- Work together as a long-term goal
- Property Types:
  - Vacant
  - Long-term hold – differing time frames
  - Redevelopment
  - Special use structures
- Outline specific features of district
- Background of potential public funding
Identify short-term funding need
Summarize preferred Concept Plan
- Identify potential alternatives
Charter this group’s role
How to work with other agencies
Rough time line for decision makers – timeframe/development schedule
- Overall process
  - MOU must anticipate necessary steps and timeframe
Early assurance between the City and the group – commitment to work to implement the Plan
Who would be signatory – City and property owners?
Shorter term development timing/thresholds
Explicit: “being made whole”
Acknowledge need for additional public involvement
Stakeholders Present

Wink Brooks, Wink Brooks Strategies
Pat Ribellia, City of Hillsboro, Planning Director
Rob Dixon, City of Hillsboro, Assistant City Manager
Colin Cooper, City of Hillsboro, Planning Supervisor
Doug Miller, City of Hillsboro, Urban Planner II
Pam Beery, Beery Elsner Hammond for City of Hillsboro
Jay Fischer, Principal Financial Group via teleconference
Mimi Doukas, WRG Design for Principal Financial Group
Ben Williams, WRG Design
Sue Iggulden, Colliers/Equastone
Laura Gentry, KG Investment Management
Gary Griff, Cushman & Wakefield
Jillian Detweiler, TriMet
Brian Newman OHSU

STAKEHOLDER STATUS REPORTS

Brian Newman mentioned that the potential sale of their vacant land to MK Development fell through.

MOU/WORK PROGRAM

Jay Fisher asked if we should finish the physical layout of the Plan first.

Mimi Doukas said that WRG has drafted a revised Plan that considers the concepts of the original Plan, yet deals with the reality of current uses.

Ben Williams of WRG suggested there might be a need for two MOU’s - one for up-front planning and one for the implementation.

Frank Parisi said that the group should outline future expectations. The level of public funding should be evaluated and if none is available, owners will likely not be able to develop.

Sean Murphy of Wakefield asked if there were any other large scale development in the works nearby. The answer was no.

Pat Ribellia said that he would expect to see something addressing certainty of entitlements from all layers of government – certainly about public funding.
Ron Lack of Equastone said that the owners of vacant land usually pay for infrastructure, but he asked what would happen if market demand does not support development – who would pay for infrastructure? Wink replied that phasing and concurrency would be important.

Mimi Doukas said that Principal would like to protect existing buildings and split up the park areas. The hard part of revising the plan was developing the street network. Land uses were rearranged, but the siting is very flexible.

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  - Overall process
  - MOU must anticipate necessary steps and timeframe
- Early assurance between the City and the group – commitment to work to implement the Plan
- Who would be signatory – City and property owners?
- Shorter term development timing/thresholds
- Explicit: “being made whole”
- Acknowledge need for additional public involvement
OHSU/Amberglen Stakeholders Meeting  
November 19th, 2008

Attendees:
Mimi Doukas – WRG Design  
Michael Cerbane – WRG Design  
Ben Williams – WRG Design  
Steve Cook – property owner  
Jeremy Stremme – Kaiser  
Steve Abel – Stoel Rives LLP  
Jan Espy – Colliers/Equastone  
Lily Ravencraft – OHSU  
Brian Newman – OHSU  
Robert Sweet – Wakefield Capital  
Don Tomasso – Wakefield Capital  
Laura Gentry – KG Investments  

Evan Gionet – Milestone Management  
Jerry Johnson – Johnson Gardner LLC  
Jillian Detweiler – TriMet

City Staff:  
Mayor Tom Hughes  
Pat Ribellia  
Colin Cooper  
Doug Miller  
Don Odermott  
Paige Goganian  
Molly Berman

Notes from Discussion:

• [Welcome & introduction by Colin]

• From the City’s standpoint, this area is a vital piece when we look at the larger 50 year growth/capacity picture for Hillsboro. The City is very much invested in making OHSU/Amberglen happen; we need to maximize capacity and provide a vital activity center. We need to move this planning process forward quickly so you can pursue your entitlements. (Pat)

• We can expect that there will be a focus on bringing people closer to where they work coming out of this economic downturn. (Colin)

• The City has the support of the region and we can assure you that the current elected officials are excitedly committed to the success of OHSU/Amberglen. Need to address two questions: 1st, How are we going to accommodate the 400k-500k people in Washington County? 2nd, Where is the Pearl District in Washington County? The central city and Washington County function as a binary system, they are both vitally important. The solar & high-tech industries in Hillsboro are growing quickly. This job growth combined with changes in how people commute (transportation/rising oil prices) will drive people to live closer to where they work. This will drive the OHSU/AmberGlen project. (Mayor Hughes)

• [Doug explains the two concept plans & the density capacity analysis]

• The Preferred Plan addresses the original vision but reconfigures the densities to account for the existing structures. The Central Park element was eliminated due to questions about its functionality and large size. Smaller parks at an urban scale provide walkable spaces and can be spread out in terms of cost. This is not the ending or final plan – the process will continue. (Mimi Doukas)

• [Colin explains the work scope & the process we need to undertake to approve the project in the Comprehensive Plan. Pat emphasizes that all of the steps in the work scope are needed in order to get the entitlements. He describes moving forward with the steering committee, public outreach, etc. so the plan can be adopted next summer.]

• Q: Is the area along 185th included in the new plan? (Jillian Detweiler)  
A: The focus is on the AmberGlen area; OHSU sold the Gateway property that will be developed at medium density transitional zoning that concept plan envisioned. (Colin)  
It’s an open question – may want to consider including it in order to capture the transit piece of this plan. (Pat)
[Don explains the transportation burdens that will need to be addressed. There is a need to reassess what transportation needs were originally based on. We have already identified the deficiencies & solutions, but we did not assess what might be achieved through transit and non-vehicular travel. (The majority of trips stay in Washington County) There is a need to look at Transit alternatives such as extending the Max Red Line, short loop circulator or long-loop circulator. ODOT acknowledges the need to address the interchange congestion.]

[Pat/Colin discuss the economic analysis study; introduce Jerry Johnson’s work scope which will provide the economic study to back-up the need for the project]

Need to look at viability of development forms and get an idea of anticipated development types. Need to look at achievable rents and also phasing. We're looking at a 5-6 week study. (Jerry Johnson)

Q: What is the time frame you will be using for your economic study? (Brian Newman)
A: We're looking at a 20 year planning horizon to see what the price-point thresholds would be.

Q: We had a study done by ED Hovee, can Jerry look at the impact of Transit also? (Jillian Detweiler)
A: Yes

Jerry discusses the work he did for Metro regarding the Activity Spectrum. It was a study which looked at pricing variation: which amenities add value? Which do not? The idea verifies that people will pay for convenience of living near amenities. Pat adds that OHSU/Amberglen is seen as an 18 hour activity level and that Jerry's study will assist our process in several ways

We are going to be moving forward with this process with this economic analysis and transportation analysis. We need help to finish the job – OHSU & TriMet have already committed financially. We are looking to stakeholders for public/private partnership. We would also appreciate any feedback on our approach today. (Colin) [$171k invested by city to date on project]

Q: Is the city going outside for the transportation analysis? (Steve Abel)
A: Yes – David Evans & Assoc, and also have in-house capacity with new transportation modeler Mark Sullivan. (Approx $94k). (Colin)

[Pat discusses proposed steering committee & asks for immediate feedback before the list is sent to be approved by City Council. Jillian confirms TriMet’s interest in serving on the committee and providing funding for the transportation study. Colin emphasizes again the importance of stakeholders taking on their equitable share of the transportation study – he will email all attendees a spreadsheet with the figures]

[Colin discusses his attendance at a recent ULI workshop where a national expert explained that the leading type of development to come out of this economic downturn will be multifamily. Sustainability (which has already been a key theme in the OHSU/AmberGlen plan) will also be an emerging trend]

Q: Have you considered another name for the project? It’s not representative of the entire area. (Brian Newman)
A: We need your recommendations on this. There is a need to more appropriately brand the district.

Q: When will the steering committee be meeting? (Jan Espy)
A: We will look to our consultants to finalize that – probably not until Jan 09.

[Closing notes by the Mayor confirm the need for public/private partnership and emphasize the enthusiasm from City & staff for moving the project forward quickly]
Discussion Summary - AmberGlen Community Plan
City Council / Planning Commission Work Session, February 17, 2009

Participants

Mayor Willey, Hillsboro City Council
Hillsboro Planning Commission
David Bragdon, Metro
Kathryn Harrington, Metro
Rick VanBeveren, Tri-met
Mark Fisher, Standard Insurance
Willey Paul, Kaiser
Matthew Klutznick, Streets at Tanasbourne
Brian Newman, OHSU
Dan Petrusich, Melvin Mark
Steve Abel, Principal Financial

City of Hillsboro Planning Staff:
Colin Cooper
Pat Ribellia
Paige Goganian
Molly Berman

Notes from Discussion:

• Welcome & Introductions by Mayor Willey

• The context of tonight’s discussion: There is a great amount of opportunity in the Tanasbourne/Amberglen area for achieving the 2040 regional centers goals. We have high expectations in terms of what can be achieved for this key urban asset in our city: 25,000 residents & 10-14,000 jobs. Tonight’s discussion is about how we as stakeholders, key players, elected officials, etc can come together to bring this area to a regional, transit-oriented hub in Wash Co that is served by the nearby employment centers. (Ribellia)

• Road map for tonight: background, status report, next steps & seek agreement in principle on the major goals. Four questions need to be answered tonight: 1) Is the original OHSU Concept Plan robust enough to make this center successful? 2) Do we generally agree to pursue Tanasbourne/Amberglen as a regional center designation? 3) Do we generally agree to pursue the study & possibility of high capacity transit through the area? 4) Do we generally agree to explore & pursue financing tools such as urban renewal, vertical building credits, etc? (Cooper)

• Hillsboro is and has been committed to created places of value [examples of Downtown, Orenco, Tanasbourne]; importance of creating “third places” and places with unique identity and enduring quality while preserving existing neighborhoods & natural resources and developing in relation to transit. (Cooper)

• Why here, why now? There is a strong interest from stakeholders to push this project forward. Wash Co is expected to absorb a large portion of the expected 1.3 million new people to be added to the region and Tanasbourne/Amberglen provides an opportunity for people to live close to their jobs, transit shopping, etc. The area has good “bones”: existing transportation framework, open space sites such as Magnolia Park and natural amenities such as Bronson Creek and Rock Creek Trail, institutional anchors such as PCC Workforce Education, Providence and Kaiser. In addition, there are 4000 existing dwelling units with a mix of multi-family and affordable housing options as well as existing retail uses such as Embassy Suites, Streets at Tanasbourne, etc. A huge opportunity exists at Tanasbourne/Amberglen for accommodating future growth. (Cooper)

* This summary includes only a portion of the conversation from the work session. The comments and responses outlined above provide a summary of the discussion and are not verbatim.
• The 11 x 17 timeline describes the successful partnerships that the City has held along the way [example of Standard Insurance]. With the development of the Westside light rail in the 80’s the city adopted Station Community zones which were tailor made at the time but due to changing circumstances have now become a constraint. (Cooper)

• The OHSU/Amberglen Concept Plan vision is guided by 7 principles: urban green, third places, connectivity, regional landmark, market flexibility, big initial phase & sustainable development showcase. The new concept plan was delivered from this previous effort but stakeholders wanted a plan that was “ground truthed” and took into account what currently exists. The goal will be to combine both of these efforts to create a realistic, marketable plan that achieves the vision. The timeline outlines plan adoption in fall ’09, adopt zoning in ’10 and then pursue financing plans afterwards. (Cooper)

• We need to commit to a shared vision in order to accomplish this successfully. We need to look at the constraints of the existing transportation system and find solutions & financing before adoption of the plan. We need to look into the economic feasibility of the project and ways to move it forward (phasing, etc). We need to move forward with zoning changes and pursue the designation of Tanasbourne/Amberglen as a regional center. (Cooper)

• A lot of work has been done the last 3 years on this project and its time to “move the ball over the line”. We need to create a public plan & public entitlements that will allow this to actually happen. In order to achieve this it’s going to require several public investments (i.e. transit designations, Metro designation of a regional center, stakeholder support, etc). Tonight is an ask of the region, of Tri-met and the stakeholders: Can we move forward collectively along these lines? (Ribellia).

• Metro and the City of Hillsboro’s relationship has grown into a great partnership. This Tanasbourne/Amberglen district has a great concept. From a regional perspective we not only want this to happen, we need this to happen. Remember what community led the region out of the last recession? It was the City of Hillsboro and their planning efforts. The city has been ahead of the market. In the 1990’s the rest of the region lived off of Hillsboro’s infrastructures [i.e. water pipes and Westside Max]. The market is going towards these types of places – people are looking to live in districts like Tanasbourne/Amberglen. The city of Hillsboro is one of the 2-3 most stable jurisdictions right now and its attest to their planning efforts. New resources need to be brought to this – regulatory tools, bricks & mortar type tools, etc. It is important to the entire region that this project be successful. (Harrington)

• This project is valuable to the City of Hillsboro, Wash Co and the entire region. Only together can we do this – shape the region; we want and need this to happen. The City of Hillsboro has demonstrated itself as a regional leader – there have been a series of tools used to date and there is a track record of the City of Hillsboro implementing a vision. Moving forward, partnership is critical to the success of this. We would like to see the success of this vibrant community and we will continue to support you and provide the necessary tools, etc. (Harrington)

• This is the exact type of project that we are looking to be involved in – it’s very exciting. I can’t make any statement of formal support but I will say that there is an opportunity for this project to be “actionable” for Tri-Met as long it meets the density requirements for a T.O.D, etc. This is the “poster child” for the kind of development we want in the region. Fred Hansen (Pres Tri-Met) has said that this is the exact kind of project that we want to be involved in, but our involvement is more down the road. We’re excited and we’re on board – this is in my district and I’m advocating for this. (VanBeveren)

• OHSU’s interests are long-term in the district. We will be holding onto parcels for decades and beyond – we literally have tens of millions of dollars invested in the primate center alone. We support the planning goals for urban development and transit in the area. Pedestrian connections throughout the district are important to us. We need to balance our aspirations with the market study. Equity among property owners is key – need to share the benefits and the burdens and its important to look at these. We are happy to keep participating but hope that the process doesn’t get delayed and will move forward according to the timeline illustrated tonight. (Newman)

• We have been participating for years on this project. Missing from the 7 guiding principles is Economic Vitality. Successful planning efforts require market realities; key benchmarks are needed. I am encouraged by the timeline and support it. Efficiencies in our planning efforts are critical – people get disengaged as the plan drags out. Our department is committed to moving the project planning forward quickly. (Abel)

• The Kaiser hospital is expected to be fully open in 2013. We reinforce our support for the project. We look forward for opportunities to participate as the plan moves forward. Our property is relatively dense (15 acres) so we are encouraged by the possibility of HCT and look forward to reducing the number of cars for our development. (Paul)

• Great job. Look back at what has historically happened in the Tanasbourne area if you think that this can’t happen. This is a great plan, very ambitious. You’ve got a great group of stakeholders and a great government. Good luck. (Fisher)

• We will need to reach out the community in this area as the process moves forward. (PC-Coulter)
• We need to keep economic vitality in mind throughout this and we need to apply lessons learned from other communities [example of Vancouver BC suburbs]. Also, we need to seek to understand how important the big green space component of this plan is as we move forward. (CC- Dennis)

• [Seeks clarification regarding the eastern edge of plan bordering 185th]
  What is most bothersome is the transportation component – I am hopeful that the HCT will help solve these issues. I also want to make sure that it's not an either-or issue (don't want to sacrifice success of South Hillsboro). (PC-Brewer)

• We may need to look at phasing for a holistic approach for accomplishing both South Hillsboro and OHSU/Amberglen. We need to look at how we can maximize funds that are available to insure that when the economy heats up people will move to this place in a hurry. (PC-Coulter)

• Our intent is to get a sense of the partnerships and agreements that are necessary to be successful and move forward quickly. We want to be able to inform the steering committee on the direction they should or should not go from this meeting that's why we need to come to an agreement on these 4 questions. Question 1) Are the goals of the OHSU/Amberglen plan robust enough to move us forward into the next phase? We can blend what we heard today into them: economic vitality, flexibility, speed, local & global competitiveness. (Cooper)

• We need to be careful to not create communities that exist on their own. How can we insure that the Tanasbourne/Amberglen community will blend with larger Hillsboro? (PC-Coulter)

• I think it's important we avoid creating another homogenous community. It could be bigger than a regional landmark if we did it right – I endorse commissioner Dennis comment: the big green space is so distinct and important. (PC-Lankford)

• What we were trying to do here is something very different than what has originally been done in the suburbs: create a true urban place. You need something big to happen early on that is led by the city. This "big initial phase" (big park originally) needs to be that spark and placemaking amenity that other things would flow out of. (Newman)

• Clarification of Coulter’s comment on blending vs. creating a distinct place? (Cooper)

• You want it to be a place that is distinct but you don’t want it to be a place where the rest of Hillsboro doesn’t believe they belong to. Something that draws everybody here – the rest of Hillsboro should be invited to it, not excluded. "A community within the community” (PC-Coulter)

• In that area people don’t know where they work: Beaverton, Hillsboro, Portland? We have dropped the ball. It needs to be part of the whole, part of the larger community. (PC-Matthews)

• It's going to be a special place where people have an affinity with that community [example: "Orencoians" first, "Hillsborians" second]. It is really important that we have a big initial first step on the jurisdictions part in order to get this thing going. (CC-Dennis)

• What is our starting point – are we starting with the original plan or the stakeholder version or is it a hybrid? (Abel)

• It will be a hybrid of the two because we want to combine and refine both efforts when moving forward. There is good foundation work that is already done & our intention is not to reinvent the wheel but to combine the efforts and move forward. (Cooper)

• This is why we wanted to bring the stakeholders to the table with the commissioners, Metro & Tri-met so that we can all hear the various concerns & interests so as we move towards plan preparation we can encompass both. This discussion sets the parameters for which we prepare this plan and for which the commissioners & council base their deliberation and policy choices. (Ribellia)

• Concern that this area is in the Beaverton School District – this is part of the identification of this as we move forward (PC-Brewer).

• I have lots of questions and concerns that are probably because of my lack of information. I look forward to participating in the future. (Klutznick)

• As someone who lives in the area, I wanted to let you know that there is a larger neighborhood that is looking to support this. Because of the investments you have made in your city, you have enabled a larger community to embrace this area. (Harrington)

• Question 2: Do we agree that the city should pursue a designation of a regional center? (Cooper)
• Intensity is what got Hillsboro where we've come today. I'm comfortable with intensity as long as it comes with unique character. As the unique factor for this project goes down, my interest goes down. (PC-Lankford)

• I will take that as consensus that we should seek a regional center for this district. Question 3: Is there a desire to extend HCT through this district? Understand that there is a local contribution: agree to density levels, financial commitment from local jurisdiction, etc. (Cooper)

• This would provide a vital transit link to the employment corridor west of this area (Intel, Solarworld, Genentech, etc). (VanBeveren)

• We need to consider the challenge of getting freight to market in this process. How can we free up freight mobility so we can get freight to market? (PC-Coulter)

• We will be doing transportation planning analysis in the next phase that will address this. (Cooper)

• Transportation and mode-split is important to OHSU. A lot can be done to maximize the investment that is already there. Local circulators, better pedestrian connections, etc can be done now. Its good to be ambitious and look at what can be done but I have a lot more questions than answers. Our first priority is maximizing the asset that is already there (Newman)

• We are working on the Regional Transportation Plan update and freight mobility is an important aspect of that so at a regional level we are looking at freight mobility as well. (Harrington)

• I will consider that a general consensus and move forward with question 4:) Consensus that city should explore public and private financing tools: urban renewal, SDCs, vertical housing tax credits, etc? (Cooper)

• Financing tools used to finance growth in the past have their best days behind them – they all have their limitations. In addition to exploring the tools that exist we should do some brain storming on what tools don’t exist or what other states and countries have used. Many of the tools we have used have been pre-empted by the legislature. What tools might we like to invent and what do we need in statute or elsewhere to be able to do it? (Bragdon)

• I will consider that broad consensus on that issue. We will continue to proceed on all of the 4 questions. Our steering committee is set to begin in March. (Cooper)

• “The Hillsboro Way” – we ascribe to that very much, it’s a way of life to us. Somebody told me several years ago that Hillsboro is poised for growth and development in the future, they’re just waiting for the economy to turn and he was correct. That same philosophy continues today and the people sitting around this table have made that same commitment by bringing their thoughts and ideas for making this a great place. Aspirations is a new term that I have a whole new appreciation for, and it is because of the planning dept and the staff at the city of Hillsboro that I am fast tracking the way I am. It is a testimony of their commitment to the success of the city. We invite you to participate in this process and we look forward to a very long and profitable relationship in the development of the OHSU/Amberglen area. (Mayor Willey)
AmberGlen Area Plan
March 31, 2009
Steering Committee Meeting
Meeting #1 Summary

This memorandum is intended to summarize discussion at the Steering Committee meeting held on March 31, 2009.

Persons Present
Jillian Detweiler, Tri-Met
Steve Abel, Stoel Rives LLP
Willy Paul, Kaiser Permanente
Wink Brooks, Wink Brooks Strategies
Marvin Lamascus, Landowner
Charles Fleisher, City of Hillsboro Planning Commission
Neshia Cameron, Landowner
Laura Gentry, KG Investment
Jan Espy, Colliers International
Mark Fisher, The Standard
Matthew K. Klutznick, Streets of Tanasbourne
Rob Dixon, City of Hillsboro (late arrival)
Katie Brewer, City of Hillsboro Planning Commission (late arrival)

Project Team Members Present
Colin Cooper, City of Hillsboro, Current Planning Supervisor
Paige Goganian, City of Hillsboro, Urban Design Planner
Alwin Turiel, City of Hillsboro, Long Range Planning Supervisor
Doug Miller, City of Hillsboro, Urban Planner II
Molly Berman, City of Hillsboro, Planning Technician II
Don Odermott, City of Hillsboro, Transportation Planning Engineer
Michael Cerbone, CardnoWRG, Planning Project Manager
Mimi Doukas, CardnoWRG, Dir. of Land Use Planning
Ryan Givens, CardnoWRG, Senior Community Planner
Scott Harmon, David Evans & Associates, Transportation Engineer
Bill Reid, Johnson-Reid, Principal
Jerry Johnson, Johnson-Reid, Principal

1. Introduction
Hillsboro Planning Manager Colin Cooper welcomed Technical Advisory Committee (TAC) members and thanked them for participating in the OHSU/AmberGlen Area planning process. Cooper provided an overview to the process and reviewed the goal of the meeting: establish direction for plan refinements per review and discussion of “hybrid” plan configurations based on the OHSU/AmberGlen Concept Plan (March 2007), Stakeholder Alternative (September 2007) and
comments received at the Joint City Council/Planning Commission Work Session (February 17, 2009).

2. Presentations
Ryan Givens (CardnoWRG) provided an overview of the evolution of the plan and presented Concept Plan Alternatives A and B.

Jerry Johnson (Johnson-Reid) provided a brief overview of the firm’s scope of work including an analysis of urban amenity values and development feasibility.

Mimi Doukas (CardnoWRG) gave the highlights from the TAC comments.

3. Review and Discussion: Draft Community Plan Alternatives
Charles Fleischer (Hillsboro Planning Commission) observed that there is not much detail provided regarding proposed uses, development types, traffic patterns, etc. Colin Cooper (Hillsboro Planning) explained that land use designations are similar to the districts in the 2007 Concept Plan and indicate different development types that provide for flexibility and a mix of uses.

Don Odermott (Hillsboro Transportation Planning) noted that the transportation component of both alternatives is similar with the alignment of Stucki and HCT routes being the primary differences. He pointed out that each alternative presents different challenges that will need to be explored.

Neshia Cameron inquired about the size of the park in comparison to existing open space at that location. Ryan Givens explained that it is similar but reconfigured slightly in the plan. Laura Gentry pointed out that the AmberGlen Owners Association maintains 28 acres of open space in the area. Doukas observed that the width of the linear park identified in the concept plan alternatives is approximately 300 feet wide, allowing for visibility across.

Gentry asked for clarification about the blue area designated as “Employment/Office Research & Development” on the plan. She also was unclear what the breakdown of office vs. retail vs. residential would be in the western edge of the plan area. Staff explained that more detail regarding use designation would be forthcoming and generally, a mix of uses will be permitted that allows flexibility in response to the market.

Steering Committee members and Staff and Consultants broke out into 3 different discussion groups.

Group Discussion: Group #1
Steering Committee Group #1 began with discussion focused on the 15-acre central park, and questioned whether this was a realistic center. The group discussed the activity that would surround the park including the appropriateness of high-rises and high densities adjacent to the park.

The group preferred the transportation network in Concept B with Stucki being aligned along Bronson Creek and the high capacity transit (HCT) aligned adjacent to the central park. They felt that an HCT alignment one block west of the park would present design challenges as it crosses Walker Road and transitions onto 194th. The group expressed a need for formal transportation alternatives and future study of the HCT northern terminus alignment.

Group #1 participants discussed land use classifications and a recommendation to consolidate the designations into three main types; suburban office, mixed use, and high rise. They acknowledged the need to clarify residential requirements for each designation. There was a strong desire to
increase densities for parcels at the neighborhood centers and light rail stations. There was also a detailed discussion about designating parcels adjacent to the central park as Medium Density Urban and designating High Density Urban for the parcels one block over. This arrangement would create intensity and building height stepping away from the central park and better facilitate initial investments in the district.

The group expressed the desire to establish clearer opportunities for an intense Urban Activity Center while integrating existing buildings. The group felt that the employment districts felt isolated and specifically questioned the designation near the Willow Creek light rail station. The participants also expressed the importance to plan within and around the OHSU property and provide more of an interaction with the eastern edge.

**Group Discussion: Group #2**

Steering Committee Group #2 identified key issues being related to the relationship between existing parcels and new configurations, and retaining a significant park feature. In designing a signature central park, the group acknowledged that the edges were important and scale should be improved. It was suggested that the central park be developed under public financing and designed to send value back to adjacent sites. Urban renewal funding was a recommended avenue for finance.

The group discussed the financial feasibility of residential towers within the community. Specifically, at $400 - $500 a square foot, there would be a resulting gap. Some participants suggested that towers may occur in a 20-year horizon but the plan should remove potential tower designations. The group questioned the regional market for the plan’s intensity and whether it will compete with local area pricing.

The group also discussed retail and voiced concerns regarding a shrinking market similar to office. Some participants expressed caution about building minimums and suggested that retail could be phased successfully with special care.

There was consensus that Stucki should be aligned along the district edge to keep automobiles away from pedestrians. This alignment would also provide an effective buffer from OHSU. The group also discussed long-term planning for high capacity transit and compared the appropriateness of light-rail versus street cars. Specifically, they felt that a streetcar would be good on the park, whereas, light rail may be more appropriately aligned on streets a block or so away. However, it was agreed that light rail serves important regional connections and if introduced into AmberGlen, it should be designed as it is in downtown Portland. The group felt that a local transit plan should be created to link the entire Tanasbourne area.

**Group Discussion: Group #3**

Steering Committee Group #3 opened with discussion focused on the original AmberGlen concept plan and the interconnected system of open spaces including linkages to natural resources within and outside of the study area. To achieve this goal, it was recommended that some local roadways be alternatively designed as pedestrian alley-ways, particularly at connections to regional arterials. There was a conscience recommendation to improve green connections and develop the central park to serve as a vibrant center of social activity. It was also recommended that on-site parking be provided around the central park. However, one property owner noted that the central park included an existing developable parcel on its southern end and advised that the City consider acquiring it.

The group recommended that Stucki be designed as a landscaped parkway to project a comfortable pedestrian environment and that the roadway design include on-street parking and curb extensions. The group preferred that Stucki align along the Bronson Creek corridor, a district edge, to open the
resource area for public use and to prevent the roadway from acting as a barrier to pedestrians within the district.

The group expressed a strong desire to plan for the future high capacity transit (HCT) alignments as part of the plan refinement although there was no consensus to the preferred route. The group discussed the two HCT alignments: one alignment located one block west of the AmberGlen Parkway/194th Avenue and the other located adjacent to the park. They noted that an electric bus of trolley might be a local alternative to HCT although it would not provide for a regional connection.

The group also acknowledged that the revised concept plans and refinement efforts were less focused on the areas along 185th Avenue and future efforts should ensure this area was appropriately integrated into the overall district plan. Finally, the group acknowledged that the implementation catalysis must include multiple projects including the Stucki/Walker extensions, central park development, and major development of the Urban Activity Center.
AmberGlen Area Plan
March 31, 2009
Technical Advisory Committee Meeting
Meeting #1 Summary

This memorandum is intended to summarize discussion at the Technical Advisory Committee meeting held on March 31, 2009.

Persons Present
Jillian Detweiler, Tri-Met, Land Development Planner
Jennifer Garland, Beaverton School District, Demographer
Steve L. Kelley, Washington County, Planning Division, Senior Planner
Gregg Leion, Washington County, Planning Division, Senior Planner
Brian Harper, Metro, Assistant Regional Planner
Andy Braun, Clean Water Services, Engineering Division Manager
John Rinier, City of Hillsboro, Fire Marshal
Henry Reimann, City of Hillsboro, Police Lieutenant
Kevin Smith, City Of Hillsboro, Parks & Recreation, Development Manager
Brian Newman, OHSU, Director of Planning
Ryan Van Gordon, NW Natural
Valerie Otani, representing Hillsboro Arts Culture Council
Ricky Icenogle, City of Hillsboro, Assistant Building Director

Project Team Members Present
Colin Cooper, City of Hillsboro, Current Planning Manager
Paige Goganian, City of Hillsboro, Urban Design Planner
Alwin Turiel, City of Hillsboro, Long Range Planning Supervisor
Doug Miller, City of Hillsboro, Urban Planner II
Molly Berman, City of Hillsboro, Planning Technician II
Don Odermott, City of Hillsboro, Transportation Planning Engineer
Michael Cerbone, CardnoWRG, Planning Project Manager
Mimi Doukas, CardnoWRG, Dir. of Land Use Planning
Ryan Givens, CardnoWRG, Senior Community Planner
Scott Harmon, David Evans & Associates, Transportation Engineer
Bill Reid, Johnson-Reid, Principal

1. Introduction
Hillsboro Planning Manager Colin Cooper welcomed Technical Advisory Committee (TAC) members and thanked them for participating in the OHSU/AmberGlen Area planning process. Cooper provided an overview to the process and reviewed the goal of the meeting: establish direction for plan refinements per review and discussion of “hybrid” plan configurations based on the OHSU/AmberGlen Concept Plan (March 2007), Stakeholder Alternative (September 2007) and comments received at the Joint City Council/Planning Commission Work Session (February 17, 2009).
2. **Presentations**

Ryan Givens of CardnoWRG provided an overview of the evolution of the plan and presented Concept Plan Alternatives A and B.

Bill Reid of Johnson-Reid provided preliminary information from their ongoing analysis of urban amenity values. He explained they are investigating the potential amenity value provided by the public park. Preliminary results indicate that if sited and designed favorably in an urban setting where view corridors are preserved, achievable residential pricing could be increased by 10-15%. The short term challenge is the Hillsboro market: how do you push price points and enable mid- & high-rises to be feasible? Reid noted the importance of a careful phasing strategy.

3. **Review and Discussion: Draft Community Plan Alternatives**

**Arterial Alignment**

Gregg Leion (Washington County) noted concerns about the number of connections to arterials. Steve Kelly (Washington County) reinforced Leion’s comments and noted the county minimum spacing requirement is 600 feet and the revised plan showed connection spaced 300 to 350 feet. Kelly noted that Wilkins is shown on the county TSP as connecting westward all the way to 185th, whereas the plan shows it falling just short of 185th. He also wanted to know what the timing, cost, ridership, and funding plans were for the High Capacity Transit lines were. He noted that it was a good idea, but there were a lot of questions that need to be answered. Leion said the on-site connectivity looked better in the alternatives than in the prior concept plan.

Kevin Smith (Hillsboro Parks and Recreation) said that he was happy to see that the central park was revised to be approximately 14.5 acres and noted the scale is much more feasible with regard to acquisition and development than the previous central park proposal. He wanted to know what the civic/institutional land use type was intended for. Ryan Givens replied that it could accommodate a range of public or civic facilities such as police, fire, education and other types of public services. Kevin observed that the central park would be designated a community park per. He said the revised plan was on the right path.

Jillian Detweiler (Tri-Met) said that she would not mind it if the spacing of connections to arterial were less than 600 feet to provide a more alternatives for connectivity for bicyclists & pedestrians. She expressed concern in seeing the connectivity of the plan diminish as it is important in achieving the goals of the plan. She wanted to know what uses the medium density urban type was intended for. Ryan replied that the intent is to leave flexibility in the zoning code to allow a number of possible uses in each of the development types, with medium density urban would lean more heavily toward residential uses. Jillian asked if it would be like the “EX zone” in the Pearl District in Portland (intensity driven by form). Ryan replied that while the team had not yet addressed that level of detail, the level of intensity would generally be driven by form.

In response to Jillian’s point, Greg Leion said that the county had no problem with bike & pedestrian connections, but did not want to provide multiple arterial connections at the expense of street function. Ryan noted that creating a great urban form in the suburbs may require some compromise.

Discussion ensued between City staff and County staff regarding the function and design of arterials within and adjacent to the plan area. Don Odermott (Hillsboro Transportation Planning) noted that Stucki is designed as N-S facility to provide relief to 185th. John Rinier (Fire Marshall) noted that Wilkins needs to be connected through to 185th Ave. Odermott said that he felt there should be two levels of arterials: regional (185th & Cornell) and local (Stucki & Walker). Walker Road around the
urban center of the plan area would have slower speeds and a TOD character. He felt that it would not be a stretch to accomplish this. Leion said that the county plan shows Walker with 5 lanes through the study area. He also said that the county may be open to accepting a higher level of activity on some arterials.

Henry Reiman (Police Lieutenant) wanted to know what the plan was for Stucki in the area to the south. Odermott said that 205th is slated for 5 lanes to Baseline. Rinier said that connection Wilkins to 185th was essential for public safety. He also asked about the projected population. Colin stated that it is about the same as the first plan, i.e. about 4800 dwelling units @ 2.5 persons per = 12,000 persons.

Steve Kelly said he would much rather see the plan show 600ft spacing and have the developer apply for a variance rather than have it in the plan and have entitlements. He also said that the current plan is much better than the previous plan. Don Odermott noted that he prefers pushing Stucki to the eastern edge (Alternative B) to provide a more comfortable pedestrian environment and to avoid creating a divide in the district.

Brian Newman said that he preferred the alignment of Stucki east along the natural area on Schematic B because it works as a buffer to the OHSU operations. Greg Leion reiterated that it is very important to provide an east/west connection across the site and was glad to see Wilkins back in the plan.

**High Capacity Transit Routes**

Brian Newman noted there was no consensus on the need for light rail and wanted to know where it would go and how it would be funded. Jillian Detweiler (TriMet) noted they are looking for federal funding and that prior to identifying a preferred alignment, there would need to be a rigorous alternatives analysis. Detweiler said that the alignment needs to be considered sooner rather than later and this is a good opportunity to start the discussion. She said that the area north of Walker is problematic. Detweiler said that Schematic A looks good, but B is preferable from an operations standpoint. She wanted to look at whether or not the uses along the park would be compatible with Light Rail.

Paige Goganian (Hillsboro Planning) wanted to discuss how connections to existing light rail would occur. Jillian Detweiler replied that TriMet would likely not move the existing station at Quatama approximately 100 feet. She observed people would be inclined to walk the 200 feet if it was a pleasant walking environment. Transfers could occur at Willow Creek. Detweiler said that the project team should consider moving the new station north of Stucki and place higher density residential in the vicinity of the new station.

Henry Reimann asked about the existing safety and crime issues at Quatama station. Jillian brought up the possibility of developing the Park and Ride as a way to bring eyes to the street. She also discussed the possibility of a shared parking opportunity at the movie theatre property on Evergreen Parkway.

**Parks and Open Space**

Brian Newman (OHSU) asked what the underlying zoning would be for the parks & natural areas. Mike Cerbone (CardnoWRG) replied that this has not been decided yet. Mimi said that it is possible to have an open space designation – due to the importance of the park site.

Kevin Smith noted that parking for the central park could be accommodated on-street to avoid the need for a large parking area. Kevin provided more detail about what a “community park” is. He
noted there not be any sports field, and expressed concerns regarding the ponds as an attractor for
geese. Smith said that the original plan connected the park to Rock Creek and Bronson Creek, but
that was not shown in the latest versions. He said that he would like to see the connections
preserved. He also said that the issue of space for auto parking for parks must be looked at. He also
said that the central park would not be a sports complex, but would be more oriented to community
events and concerts. He said it would require a fairly intense master planning process. He also
mentioned that the ponds may have to go due to the geese problems.

Brian Newman expressed concern regarding the “conservation area” shown north of the proposed
Wilkins extension and how this might impact OHSU’s ability to develop the area.

Initial Public Investment
Bill Reid (Johnson Reid) said that the central park makes the area a compelling residential choice
though parks are not a make or break feature especially for mid to high rises. Too much cross-
circulation of people coming in could be a livability conflict. Reid said he would discourage seeing
development of the central park as the initial catalyst. Reid said that success requires a “three
legged stool” that balances open space, employment access, and commercial opportunities. Reid
noted that South Waterfront in Portland only has two of the legs and the pricing is 50% less than that
of the Pearl. Reid observed that starting with the park as an initial phase may not be the most
effective strategy, and careful phasing would be required to support retail development. Don
Odermott asked how the road network would factor in with the initial investment. Bill explained that
fast, convenient access to employment is critical for success.

Considerations Moving Forward
Jennifer from the Beaverton School District noted that if the projections are accurate they may need
to build a new elementary school to service the area. She noted that the district prefers to choose
their own sites as opposed to have sites chosen for them.

Ryan Van Gordon from NW Natural Gas did not express any concerns and noted the area could be
served.

Brian Harper from Metro did not voice any concerns, he noted that the Metro is reevaluating the
concept of designating the area a regional center. He noted that the HCT is currently second tier
project, although this plan will assist in elevating the HCT to a first tier.

The next TAC meeting is scheduled for April 15, 2009. There is a web site set up for the project on
the City of Hillsboro website: http://www.ci.hillsboro.or.us/Planning/OHSUAmberGlen.aspx

Attachments:
Open House #1 Summary Notes
AmberGlen Community Plan
April 1, 2009

An open house for the AmberGlen Community Plan (Community Plan) was sponsored by the City of Hillsboro Planning Department on April 1, 2009 from 5:30 to 7:30 p.m. The open house was held at the AmberGlen Conference Center located within the Plan area and was attended by approximately 45 people including local residents, employees, and other interested parties. The purpose of the Open House was to provide an opportunity to learn more about AmberGlen area planning and to provide comments. The April 1, 2009 open house was the first of three public events scheduled to occur during the Community Plan process.

INFORMATION PROVIDED

Hillsboro Planning Manager Colin Cooper provided a brief of the project history outlined issues to be addressed as part of the Community Plan process including:
- Refinement of the development plan concept;
- Assessment of market feasibility;
- Transportation system analysis; and
- Development and adoption of the AmberGlen Community Plan (targeted for Fall 2009).

Information was provided on the vision and concepts established during previous planning for the area (2007 OHSU/AmberGlen Concept Plan). Ryan Givens of WRG (project consultants) gave a presentation showing the project progression from the Phase I OHSU/AmberGlen Concept Plan (2007) to the draft schematic concept plan alternatives. The presentation and schematic concept map alternatives are provided as an attachment to these meeting notes.

QUESTIONS AND COMMENTS

Attendees were asked to comment on the schematic concept plan alternatives. Questions and comments received by participants and staff members’ responses are provided below followed by written comments received. (Q. = Question; C. = Comment; R. = Response)

Q. What about schools? Have they been considered in this planning process?
   R. Beaverton School District has a representative on the Technical Advisory Committee. The plan designates space for public uses but we have heard from the BSD that they like to choose the location of their school sites and they have a lengthy process to do so. Estimates for new households indicate that there will likely be a need for an additional school (Hillsboro School District) within the Community Plan area.

Q. What will happen with the OHSU research campus?
   R. OHSU’s current research operations will remain for the foreseeable future.

Q. Has the traffic impact on roads outside of the study area been considered?
   R. The scope of work for the project team includes transportation system modeling and analysis of offsite traffic impacts related to Community Plan development.

Q. What is the forecasted future population of the area if it develops as planned?
   R. 4,000 to 6,000 dwelling units are estimated within the Community Plan area. [x 2.5 persons per dwelling unit = 10,000 more people approx] Land use refinement work over the coming months will provide more detail regarding the scale and type of proposed residential development.
Q. Where will the future residents be coming from?
R. Metro oversees the growth projections for the region and they foresee a large amount of growth to the region in the next 20 years. Metro’s forecast calls for a large percentage of the regional increase in population to locate in Washington County. Hillsboro currently has more jobs than residents and is positioned to take on a lot of that growth.

Q. What will be the impact on traffic on Hwy 26?
R. Transportation modeling has begun and will identify potential impacts to the transportation system including the interchange at Hwy 26 and 185th Avenue. Recent job growth has occurred primarily in Washington County rather than Portland.

C. Future increases in gas prices may reduce the number of auto trips taken so people will benefit by living closer to their place of work. Try to incorporate sustainability and local expertise in green technology (such as SolarWorld) into the plan.
R. Sustainability is one the guiding principles of the Community Plan. There is a great opportunity to draw up the expertise of local businesses to ensure efficient, sustainable development features.

C. Prefer not to align Stucki along the greenbelt next to the OHSU campus – could be restaurants/bars instead.

Q. Are there plans to incorporate the use of roundabouts or traffic circles?
R. We don’t have any roundabouts in the plan at this time, but we are open to looking at various solutions to traffic issues. They can present a challenge with a High Capacity Traffic line. In Oregon, you don’t see roundabouts on 5 lane roads. They can also conflict with goals to provide a convenient, safe pedestrian environment.

Q. Will there be bus service to the Light Rail Stations? Need more north/south bus service – there is no way to get to the station at 205th without getting in your car.
R. Previous planning for the area recommended a circulator bus - like a trolley with wheels or rapid fire bus. Planning for the Community Plan will address how to provide connections to existing and planned regional transit like MAX.

C. Make sure that new residential construction is not done in a haphazard manner and that it integrates with the existing neighborhoods.
R. We will look carefully at the interaction within the district and with the surrounding areas. Schematic concept plan alternatives locate a transitional residential development type adjacent to similar development outside the Community Plan area.

Q. What about arts and culture, especially if this is going to be designated a regional center?
R. A representative from the Hillsboro Arts and Culture Council is participating on the Technical Advisory Committee. A strong arts and cultural element is needed for a district of this size and intensity, possible in the urban activity center. It needs to feel authentic and unique.

C. Be aggressive in trying to retain open space and natural areas.

Q. What is meant by the Medium Density design type?
R. Medium density residential with some office and retail. Housing could be townhouses or apartments. Buildings would be 3-6 stories with 50-100 units per acre.

C. Consider the impacts on residents during the construction phase.
R. The city requires management of potential impacts to neighbors by development construction. For example, management plans for access and parking during construction may be required for development approval.
WRITTEN COMMENTS

1. The plans seem to hinge on residents and businesses tying together foot traffic and mass transit. Historically, this hasn’t happened. Workers come in from outside areas, residents work elsewhere, vehicles remain the dominant mode of transport. If this is reality, does the plan still work?

2. Please work to secure as much land as possible for park, green, conservation and trail space. This means closer to original plan, the newest version is much too little – especially with the undeveloped land from OHSU: once it is gone, you don’t get it back. In the long run, keeping such space is better for the community: better value, more appeal, higher visitation. Empty offices don’t offer that.

3. I am not in favor of this type of development and the impact on our quality of life.

4. Do not like idea of all these high rises in this area.
AmberGlen Community Plan
City of Hillsboro

Wednesday, April 1, 2009

Land Use Concept Plan
- Focus on central park & green spaces
- Mixed use urban community
- Nine development types
- Design standards, thresholds, minimum square footage
- Structured parking
Central Park/Open Space
- Major Central Amenity
- Interconnection Open Space system
- Natural Corridors
- Pocket Parks
- Green Streets

Urban Activity Center
- Intense mix of major retail, medium to high density housing, office, restaurants, hotel, entertainment, conference center and civic gathering spaces.
- 3 to 25 story buildings
- Approx. FAR 3.0
- Approx. use mix: 24% retail, 24% residential, 14% office, 7% hotel/conference, 30% structured parking
**High Density Urban**

- High density residential and office with some ground floor retail
- Average 10-12 story buildings; up to 25 story point tower
- Housing range could include townhouses to point towers, up to 250 units per acre
- Approx. FAR 3.0
- Approx. use: 60% residential, 16% office, 4% retail, 20% structured parking

**Medium Density Urban**

- Medium density residential with some office and retail
- 3-6 story buildings
- Housing range could include townhouses to apartments/lofts, primarily between 50 and 100 units per acre
- Approx. FAR 1.5
- Approx. use mix: 71% residential, 6% office, 3% retail, 20% structured parking
Medium Density Transitional
- Medium density residential with some office and retail
- Provides transition to adjacent neighborhoods
- 3 - 4 story buildings
- Housing range could include townhouse and low-rise apartments, between 20 and 50 units per acre
- Approx. FAR 0.65
- Approx. use mix: 77% residential, 5% office, 3% retail, 15% structured parking

Employment/Office/Research & Development
- Primary office/R&D with service retail
- 2 - 8 story buildings
- Urban or campus setting
- Approx. FAR 1.0
- Approx. use mix: 77% office, 3% retail, 20% parking
Civic/Institutional

- Open space, recreation,
- Public services (police, fire, etc), schools, colleges/universities, civic/community
- Permitted anywhere

Neighborhood Center #1

- Neighborhood service retail with some office adjacent and/or above residential
- 1 to 6 story buildings
- Approx. FAR 0.7
- Approx. use mix: 45% retail, 14% office, 11% residential, 30% structured parking
Neighborhood Center #2
- Neighborhood service retail with some office adjacent and/or above residential
- 1 to 6 story buildings
- Approx. FAR 0.45
- Approx. use mix: 65% retail, 20% office, 15% residential, surface parking
Subsequent Stakeholder Concerns

- Feasibility of Plan
- Existing Buildings and Development
- Phasing
- Improvement Costs
- Large Central Park
AmberGlen Community Plan
Preferred Alternative - DRAFT

City of Hillsboro

AmberGlen Community Plan

Schematic Concept A
- Stucki Central Alignment
- Designated Transit Street
- Regular Grid Pattern
AmberGlen Community Plan
City of Hillsboro

Schematic Concept B
- Stucci Boundary Alignment
- Parkway & Transit Street
- Irregular Grid Pattern
Discussion Summary - AmberGlen Community Plan
Technical Advisory Committee, April 15, 2009

Participants:
Ryan Van Gordon, NW Natural
Carrie Pak, Clean Water Services
Steve Kelley, Washington County
Gregg Leion, Washington County
Steve Davis, Tualatin Valley Water District
Jennifer Garland, Beaverton School District
Jessica Tump, TriMet
Martin Jensvold, ODOT
Ricky Icenogle, City of Hillsboro Building Dept
Kevin Smith, City of Hillsboro Parks Dept
Scott Harmon, DEA

Project Team Members Present:
Ryan Givens, CardnoWRG
Mimi Doukas, CardnoWRG
Michael Cerbone, CardnoWRG
Colin Cooper, City of Hillsboro Planning Dept
Paige Goganian, City of Hillsboro Planning Dept
Don Odermott, City of Hillsboro Planning Dept
Mark Sullivan, City of Hillsboro Planning Dept
Pat Ribellia, City of Hillsboro Planning Dept
Doug Miller, City of Hillsboro Planning Dept
Molly Berman, City of Hillsboro Planning Dept
Dan Dias, City of Hillsboro Planning Dept
Bill Reid, Johnson-Reid

I. Overview
Colin Cooper (COH) welcomed the Technical Advisory Committee members and noted that discussion will focus on presentation and review of refinements to the Schematic Concept Plan, and the Johnson-Reid memo on Urban Amenity Values and Public Park Space (April 7, 2009).

II. Refinement of Schematic Concept Plan Map and Cross Sections
Ryan Givens (CardnoWRG) presented a revised schematic concept plan map (Draft April 14, 2009) and cross-sections designed to respond to feedback heard at the previous TAC/SC meetings (March 31, 2009):
• Reduce access spacing to 600 foot spacing to arterials. Pedestrian connections can be retained.
• Provide a general preferred location for HCT west of the park. It is premature to indicate specific routes and transit type (i.e. LRT, bus rapid transit).
• Stucki arterial alignment shown west of Bronson Creek preferred (Alternative B, Draft March 26, 2009)
• Extend Wilkins alignment to 185th.
• Explore higher density/taller development alternative locations: directly adjacent to the park, and stepping back with highest densities one block off.
• Revise Neighborhood Commercial designation for Capital Center to reflect ownership by the Beaverton School District (BSD). BSD educational facilities are expected to expand in the future at this location.
Transportation/Street Alignment

Jennifer Garland (Beaverton School District) appreciated locating the revised Wilkins alignments south of the BSD property instead of going through it. She was concerned that the existing cafeteria building located between Capitol Building & Wells was impacted by proposed local street alignments and asked for them to be modified. She requested that the ownership map be revised to reflect BSD ownership of the Capitol Center property.

Steve Kelley (Washington County) was pleased to see the Wilkins extension to 185th and noted that the two straighter alignment options are more realistic for a collector. He said that Number 2 looks the best because it has the best access, but either would work for the county at an initial glance. Steve also said that there is significant improvement regarding the access spacing along county arterials but there might be concern at the west end of Walker. He noted that the City may wish to look at access spacing on 206th & Stucki. He expressed that the plan is improved, and is interested to receive additional information on details. He expressed thanks for listening to the county’s concerns.

Don Odermott (COH) explained that a better understanding is needed of who would be using Wilkins and where they are trying to get to. He stressed the need for looking at travel flow from the employment core with modeling to see what the right solution would be. He noted the importance of an existing signalized access at the driveway between the BSD property & Parr Lumber. Jennifer (BSD) asked if there is room to put a road between the Capitol Center & Wells Fargo. She explained that their preference would be that road be situated to the west of the Wells Fargo building. Don (COH) responded that the main thing is making connections and that we will be looking more closely at this in the future. The road could be a private drive with easements that allow for access and circulation.

Steve (Washing County) pointed out that where the median planting is shown on the Stucki street design there would need to be a left turn lane for most of the access points. He stressed to keep that in mind when looking at access spacing.

Scott Harmon (DEA) inquired about plans for a multi-use path along the creek in an effort to move bikes off the street. Don (COH) mentioned that this tool has been previously used on Brookwood Parkway and it seems to be well received by the community. He expressed that we need to look at this arterial as a community arterial and function as low speed friendly urban environment. Don noted that general street alignments were well received by the community at the Open House (April 1, 2009).

Don (COH) gave an update that the HCT component of this plan was ranked in the 3rd tier at Metro with an opportunity to be bumped up to a level 2 tier. He further discussed the process used by Metro for ranking/scoring projects. Brian Harper (Metro) pointed out that there is ongoing discussion by the Metro Council for weighting the scoring. He observed the process is still in a preliminary stage.

Martin Jensvold (ODOT) expressed concern with anticipated trip generation related to up-zoning properties and the creation of a new regional center. Don (COH) emphasized that the city has recognized the need to maintain mobility of US-26 because of the large industrial area to the west that rely on that mobility. He stressed that finding a balance between growing this high-density area and maintaining mobility is a priority. Pat Ribellia (COH) asked Martin (ODOT) about the nature of his concern regarding the designation of the area as a regional center. Martin (ODOT) explained that congestion issue at existing regional centers is already an issue ODOT struggles with, so the creation of another center raises concerns.

Parking

Gregg Leion (Washington County) inquired about locations for parking. Colin Cooper (COH) recalled a suggestion made by a Steering Committee member for putting a parking structure underneath the park. Ricky Icenogle (COH) brought up the issue of a low water table in the area. Kevin Smith (COH) thought the concept was interesting but presented concerns from a landscaping perspective. He noted that it is problematic to plant materials larger than shrubs because of the low soil profile. Mimi Doukas (CardnoWRG) suggested that pushing a parking garage back a block from the park would help to create more active uses adjacent to the park – it would allow for a better interface of uses adjacent to the park. Paige Goganian (COH) observed that careful design would be required to ensure that that auto access to the underground parking structure would not create barriers to pedestrians and activity at park edges.

Sustainability Features

Carrie Pak (Clean Water Services, CWS) inquired about the treatment of storm water runoff and asked if the “urban green” concept was still part of that plan. She observed that the plan materials did not reflect green streets and other sustainable features identified and supported in previous work. Colin (COH) explained that the project team had not looked at specific design components at this point but the goal for the development to be a “sustainability showcase” remains a strong plan component. Paige (COH) noted that the City is submitting an application to the Environmental Protection Agency (EPA) under the Smart Growth Implementation Assistance program for technical assistance related to identifying, evaluating and funding potential sustainability features. If the EPA application for AmberGlen is successful, a national team of experts will visit and work with key stakeholders to identify opportunities for integrating sustainable systems. In terms of green streets, the street layout must first be confirmed, and opportunities and constraints related to storm water management analyzed as part of the plan’s implementation. Carrie (CWS) asked for clarification that if we didn’t get the EPA grant would that equate into not getting green streets in the area? Paige (COH) responded no. Carrie (CWS) suggested showing the cross...
street sections with green street principles on them so we don't loose sight of those principles. Paige (COH) emphasized that the point is well taken and that we will take the "urban green" concepts will be brought forward.

Natural Resource Impacts

Carrie (CWS) stressed the importance of staying out of the vegetative corridor in regards to the multi-use path. She also suggested pre-identifying impacts to natural resources and vegetative corridors and doing pre-impact mitigation for a consolidated area so that it's not done on a project by project basis as development occurs.

III. Urban Amenity Values and Public Park Space

Bill Reid (Johnson-Reid) summarized findings from his Memorandum (April 7, 2009) on the value of improved City park space as an urban amenity and catalyst for planned high-density mixed-use development. He explained that a sizable central park maximizing proximity to urban residential forms will economically benefit the feasibility of redevelopment. However, the park amenity must be considered as one of three critical components, the other two being employment proximity and retail/commercial services within walking distance. Bill explained that a park facilitates higher density residential development nearby when configured to be longer to maximize edges and proximity to residential development; programmed primarily for more passive, quiet activities; and designed to maximize residential views and emphasize natural features versus highly developed community/event spaces widely used by people outside the area. He estimated that a well-designed and programmed park can boost prices by 15-20%. Pat (COH) asked how he arrived at 15-20% and asked for clarification of the analysis of natural/passive parks vs. improved parks. Bill explained that the estimated price premium is based on similar projects elsewhere using a hedonic model and analysis of similar projects. He stressed that improved park uses that are indoor and well-planned might work. Noisy, outdoor uses would most likely have a negative effect.

Bill (Johnson-Reid) recommended the City pursue park/open space as a distinct amenity for the plan area but emphasis should be put on increasing proximate retail/commercial services, especially uses that generate the highest number of daily trips. He compared Amberglen to the South Waterfront, Peal and Downtown districts in Portland. He observed that even though South Waterfront possesses prime natural resources (river view, etc) it achieves much lower price points than the Pearl District because of fewer employment opportunities nearby (compared to Downtown) and significantly fewer retail/commercial services in the district. Bill stressed that a premium needs to be put on strengthening commercial services in the district. He reasoned that if you can provide a compelling mix of retail/dining/entertainment and park space around a condo tower, people will be more willing to trade car/car expenses for a higher home price for the benefit of living close to such amenities. Bill noted that The Streets of Tanasbourne is a compelling retail offering for potential residents. He recommended an emphasis should be placed on improving access to The Streets, routing traffic away from the congestion of the 185th corridor and interchange.

Park Configuration and Character

Kevin Smith (COH) agreed that a park in itself would not be enough to make this project successful, but a poorly planned park would have a negative impact on residential prices. He emphasized the importance of quality and designed, no matter what the size. Kevin clarified that there is a significant demand for natural areas (for hiking, etc.) and the proposed central park property is not going to be a natural setting. He noted opportunities for natural open space/park areas in other parts of this plan area (Rock Creek Trail). Kevin asked about the trade-off between park and commercial amenities and questioned whether it would be better to reconfigure the park to allow additional commercial development. He stressed that he has a concern that as time goes on and things get developed, the park becomes the default location for added development and the park size shrinks over time. Bill explained that their findings suggest there does not need to be any major modifications to the park as it is now, but acknowledged that a slightly narrower park would create more land for potential commercial and residential development.

Bill (Johnson-Reid) recommended putting mid-rise development directly adjacent to the park and pulling the high-density back to preserve views for both uses. He also explained that mid-density projects are less risky and with the success of a few mid-rise projects it would entice more people to take a risk on building high-density point tower projects that are proposed for the area. Pat (COH) asked Bill if the park with a mid-rise building located adjacent is enough of an amenity for the builder to take the risk? What else is needed? Bill responded that park alone is not going to make the project feasible – it's going to take some public involvement through urban renewal, for example, to help contribute to parking for those residential facilities or other infrastructure that improves the investment environment. This, in conjunction with the park, access to jobs and commercial services nearby will all be required.

Colin (COH) asked Bill if there is a price tag/percentage on HCT and what its benefit would be in combination with the other factors. Bill (Johnson-Reid) responded that they had not looked at HCT in detail. In Portland it's taken as a given that most areas are served by transit.

Don (COH) asked Bill about the retail north and east of the district and thoughts on how to bridge the retail that is beyond walking distance to high density housing with transportation, for example with a streetcar or district circulator. Bill (Johnson-Reid) responded that it's worth trying (example of the streetcar on South Waterfront) and said he did not think HCT would be very useful for addressing the obstacle. Bill reiterated that The Streets of Tanasbourne is the type of retail that should be encouraged. Pat (COH) asked if the Streets of Tanasbourne provides enough retail/service uses to serve Discussion Summary – AmberGlen Community Plan

Technical Advisory Committee, April 15, 2009
the Amberglen area? Bill responded that it is not large enough to be a regional anchor on the scale of a Bridgeport Village. Anything that can be done to strengthen the Streets of Tanasbourne, especially with regard to vehicle access from US-26, is key.

Jessica Tump (TriMet) emphasized that there is not one element of this plan that is going to make it work alone (Parks, HCT, etc) – it’s all the elements combined and the interaction between them that is actually going to make it work. She also stressed the importance of urban design and eyes on the street.

Pat (COH) questioned whether this discussion is changing the dynamics of the concepts. Mimi (CardnoWRG) responded that the discussion is consistent with the direction of refinements reflected in the Schematic Concept Plan presented earlier in the meeting: The park has been narrowed and the highest densities have been pulled back a block from the park. Colin (COH) agreed with Mimi and stressed that the mixed use component should be clarified relative to retail – do we need something that mirrors across the Streets of Tanasbourne or do we create a commercial node further south in the plan area. Mimi added that some type of circulator (streetcar, etc) is needed to link the residents to the full Tanasbourne district.

Pat (COH) asked Jessica (TriMet) if the scale of development suggested by the land use concepts begins to get us to the ridership levels that we need to be at to achieve the HCT? Jessica (TriMet) responded that the plan is still in vague form and the types of land uses are not specific enough to comment further on the question.

Ricky Icenogle (COH) stressed that people are not going to come to this park/district with the current congestion problems at US-26. Colin (COH) observed that Hwy 26 interchange improvements directly address access to the plan area and noted that the question hinges on who this park actually serves.

Ryan (CardnoWRG) explained that the ability to create an “urban buzz” is what is needed to actually draw people to this district – that’s the entertainment/dining/shopping piece of the “3-legged stool”. Ryan wondered what types of public and civic uses should be encouraged in the urban activity center to help activate the area – library, theatre?

Bill (Johnson-Reid) observed that within the timeframe in which this project will be built, Portland’s central eastside will be going through an “urban renaissance” that will outshine the Pearl District. He recommended that the identity for the Amberglen district be based on what makes sense here and to focus on what makes this development framework unique, rather than trying to recreate what has happened in Portland central city districts. Pat asked Bill if AmberGlen will compete in the long term with Portland - what is our market? Bill responded that AmberGlen should not compete with Portland – if this goes in the direction of being too similar to what is going on in Portland than you are going to compete with them. Jessica (TriMet) added that this district would be an option for people who work in the industrial/high-tech employment clusters in the area and want to live closer to their place of employment. Bill noted that there is a huge commute pattern from the Pearl District to Washington County (Intel & Nike employees), indicating the presence of a market to tap into for the type of development in Amberglen.

Ricky (COH) questioned the idea that the park as currently presented should be changed. Bill (Johnson-Reid) emphasized that there is nothing wrong with the park configuration, and it could be narrower to provide a stronger economic catalyst to more of the residentially designated areas to the East. He clarified that Johnson-Reid’s findings do not suggest major modifications to the park.

Don (COH) asked Bill if one-way street grids serving areas in the core of this district would be positive or negative. Bill (Johnson-Reid) answered that anything that enhances the walkability of the area is key, and while one-way grids can reduce street widths, two-way grids with pedestrian design elements could also serve the district well. He observed that two-way grids can be problematic for retail and explained that for commercial on the ground floor largely served by district residents above, negative impacts related to a one-way grid system would be minimized.

Colin (COH) thanked everyone for their participation and attendance. The next meeting is scheduled for May 13th with discussion focused on specificities of the land uses, transportation issues/modeling findings, and continued refinement of the plan configuration based on TAC and SC discussion.
Discussion Summary - AmberGlen Community Plan
Steering Committee, April 15, 2009

Participants:
Scott Harmon, David Evans & Associates
Matt Baker, Parr Lumber Co
Dan Petrusich, Melvin Mark Properties
Jessica Tump, TriMet
Charles Fleisher, Hillsboro Planning Commission
Willey Paul, Kaiser Permanente
Matthew K. Klutznick, Streets of Tanasbourne
Laura Gentry, KG Investment
Marvin Lamascus, Landowner
Brian Newman, OHSU
Rob Dixon, City of Hillsboro

Project Team Members Present:
Ryan Givens, CardnoWRG
Mimi Doukas, CardnoWRG
Michael Cerbone, CardnoWRG
Colin Cooper, City of Hillsboro Planning Dept
Paige Goganian, City of Hillsboro Planning Dept
Don Odermott, City of Hillsboro Planning Dept
Pat Ribellia, City of Hillsboro Planning Dept
Doug Miller, City of Hillsboro Planning Dept
Molly Berman, City of Hillsboro Planning Dept
Dan Dias, City of Hillsboro Planning Dept
Bill Reid, Johnson-Reid

Introduction:
• Colin Cooper (COH) welcomed the Steering Committee members and informed everyone that the intent is to move rapidly as promised at the February 17, 2009 meeting. He explained that today’s meeting will cover the refinements of the concept plan and a review of the Johnson-Reid parks amenity memo.

Bill Reid’s Economic Memo/Park Discussion:
• Bill (Johnson-Reid) summarized the findings from his memo which explores the park amenity as a catalyst to enhance the financial/market feasibility of high-density residential uses that are planned to be at AmberGlen. He explained that they looked at other projects to see how parks had been used to enhance property values and also to see what has been learned from examples in the Portland metropolitan market. Bill explained that they found that a park is a very strong amenity but it needs to be looked at along with other factors. The park, as it is currently designed, is in a long shape which does maximize the “strong edge” concept of enhancing the potential feasibility of residential development nearby. Bill suggested that the park could be narrower but that it does accomplish what it needs to fairly well.

• Bill (Johnson-Reid) explained that natural park space versus highly improved park space is stronger in helping to spur residential redevelopment nearby. Outdoor uses that tend to create traffic and noise dampen the value of the park as an asset to the nearby residential areas – there is a fine balance that needs to be struck.

• Bill (Johnson-Reid) explained that parks tend to add 10-20% additional residential value to residential developments anywhere from 500-3000 feet away. Bill encouraged the committee to look at park space as one leg of a 3-legged stool, along with strong nearby employment and commercial opportunities. [South Waterfront vs. Pearl District example]. Bill
 discussed the idea discussed last meeting (March 31, 2009) regarding stepping back densities surrounding the park to preserve views for both mid and high rise buildings. Bill agreed with the idea and encouraged mid rise directly adjacent to the park – he suggested it was less risky and a better catalyst for spurring development.

**Park Discussion:**
- Charles (Planning Commission) pointed out that image and identity are key components of the park; he questioned what the value of identity, which is created by this park, would be. Bill (Johnson-Reid) responded that he had no specific example of where a park has been the singular image of a project. He pointed out that the area is already park-like, but he did not think that the identity of the park itself would be strong enough to equate into capitalizing residential values. He stressed that it is important to have a strong, focal point park for this community but that the views, access, proximity, the quiet that comes from it, and the ability to recreate in it, are what create a sense of place in a way that people are willing to live there.

- Colin (COH) asked if there was any negative side to having a park. Bill (Johnson-Reid) responded that the residential development across from the park would have commercial/mixed-use on the ground floor that would largely be served by the local residents so he did not see any potential conflict. He pointed out that successful retail streets are those that have a continuous flow of shops with a bus line directly adjacent and without dead zones as far as shopping is concerned [Vancouver example].

**PowerPoint Presentation:**
- Ryan Givens (CardnoWRG) gave a presentation that reviewed the previous alternatives A & B and summarized the feedback heard at the previous TAC/SC meetings (March 31, 2009) which was considered in the most recently revised version:
  1. 600 foot spacing – too many connections to arterials
  2. HCT – not necessarily light rail at this point; alignment
  3. Stucki: preference to alignment on Alternative B; questions of design of Stucki cross section?
  4. Wilkins alignment; continuing to 185th
  5. Land uses around central park – high density directly next to as a catalyst or more low/mid-rise?
  6. Beaverton School District does not have plans for their property to develop as neighborhood center

- Ryan (CardnoWRG) explained that the two plans were married into a refinement plan. The new plan identifies a preferred corridor for HCT west of the park but it does not determine what it will be or specifically where it will run. Also, land use adjustments were made for areas around the park: mid-rise is designated directly adjacent to park with high-rise stepping back. In addition, the land use designation for the school property was changed to civic/institutional use. Wilkins is brought to 185th but the exact location of the extension will need to be discussed further. Ryan explained that some of the local connectors to arterials were changed to pedestrian pathways with the intent of keeping the urban form but respecting the required intersection spacing the county requires. Ryan explained the urban form cross sections which illustrate the stepping back of densities surrounding the park. He also presented the two design alternatives for Stucki.

**Transportation/Multi-Use Path Discussion:**
- Ryan (CardnoWRG) brought up an idea mentioned at the previous TAC meeting (April 15, 2009) for creating a multi-use path along the creek corridor for bicyclists and pedestrians. Don (COH) explained further that the path would pull bicyclists off the street into a pedestrian friendly environment, while helping to maintain mobility. Rob (COH) brought up the point that taking bike lanes away from the traffic and separating uses greatly improves safety.

- In addressing the cross section of Stucki cross sections, Don (COH) suggested Evergreen Pkwy as an example of a more pleasant, parkway-type feeling. Don further explained that Stucki needs to be a community arterial with tighter access spacing, but he questioned how to do that without creating a series of left-turn lanes. He asked Bill (Johnson-Reid) about the impact of a one-way street grid. Bill responded that from a high density residential/mixed-use perspective a one-way grid doesn’t do any harm as long as pedestrian access and safety is maintained.

- Ryan (CardnoWRG) presented the three different alternatives for connecting Wilkins to 185th and asked the Steering Committee what changes they would like to see reflected in future refinements.

**Steering Committee Discussion:**
- Charles (Planning Commission) asked why the land use area along 185th is continually incorporated into the plan. He suggested that it zapped strength from the planning effort and that AmberGlen is symmetrical and has a natural border by the stream, plus the area is already planned out. He asked if it would be possible to track its development but set it aside and focus the energies into the essential plan? Colin (COH) responded that it is included because of the Willow Creek station and because the extension of Wilkins is an important component for satisfying Transportation Planning Rule requirements. In addition, OHSU is developing their property at the densities that were considered in the original plan. Mimi (CardnoWRG) added that there are 2 future reasons to include it:
  - Encouraged the committee to put more emphasis on strengthening the nearby commercial and retail opportunities, along with maximizing potential public investment.
  - Bill (Johnson-Reid) also discussed the idea discussed last meeting (March 31, 2009) regarding stepping back densities surrounding the park to preserve views for both mid and high rise buildings. Bill agreed with the idea and encouraged mid rise directly adjacent to the park – he suggested it was less risky and a better catalyst for spurring development.
1. The creek will separate the area unless we knit it together and we need to have OHSU involved in how that is achieved;
2. We are trying to create a regional center – we are looking at a bigger context of what this district can be on a 20-year timeframe (including Tanasbourne area, etc).

- Brian (OHSU) stressed that OHSU is adamant that there not be a street extension across their property (Wilkins); it is non-negotiable. This is 1 of 4 primate centers that has the ability to grow and they are in line to receive several federal grants so there are plans to expand the facility. Security is a real concern for the primate center; any trail or public street East of Bronson Creek between Bronson Road and the Light Rail is a huge concern. He expressed that he is sympathetic to what is trying to be achieved and he is willing to engage in continued dialogue concerning this.

- Don (COH) presented a brief history of why Wilkins was designated to connect to 185th in the TSP. He explained that the Wilkins connection and the spacing along the arterials are the biggest concerns from Washington County.

- Matt (Parr Lumber) expressed preference to the first two alternatives for the Wilkins alignment because of the retail land uses that are adjacent to it and because, from a vehicle standpoint, it’s easier to get to.

- Charles (Planning Commission) brought up the issue of road design in response to OHSU’s concern with the extension of Wilkins through their property. How could it be designed so that it would be more acceptable?

- Marvin (Landowner) expressed concern that the original concept plan has been wiped-out completely, from the size of the park being reduced to taking away the high-density point towers that were intended to create mixed-use with retail on the ground and residential above. He expressed that the original design seemed to be more pleasing to the neighbors he has spoken with. He asked why the traffic circle has been removed and why the original concept plan has been neglected. Mike (CardnoWRG) responded that the goal was to combine the original concept plan with the stakeholders plan and rest at a preferred alternative plan. He further explained that the goal is to achieve a more feasible plan. Don (COH) explained that roundabouts are not necessarily pedestrian and bicyclists friendly plus if HCT or transit were to come through, a roundabout would present additional challenges to overcome. Mimi (CardnoWRG) added that part of the current charge is to take the original vision document and move it towards implementation; there is a lot of public investment that needs to go into this plan (public financing) so there is a certain amount of reality that needs to be built into the market forces for this district. There needs to be a certain amount of return and tax increment that comes out of the plan over time. She stressed that we need to make sure that when there is an investment, like a public park, that we are maximizing how the value is spread throughout the district so that it matches the initial public finance mechanism. She further added that the mixed-use component is still a real commitment of this plan.

- Pat (COH) mentioned that in the previous TAC meeting (April 15, 2009) Bill (Johnson-Reid) discussed the importance of nearby retail services. Bill (Johnson-Reid) advised a 2 phase effort for moving forward: achieve a successful mid-rise district with the existing park plus an investment in improved transportation/access to Tanasbourne off US-26, and then explore how additional retail can support high-density development over time. With the existing transportation access in place, any attempt to ramp up retail will fail and is only going to create problems for the Streets of Tanasbourne. Pat asked if the Streets of Tanasbourne is enough to support the district at full build out. Bill responded that at full build out, alone, it is not big enough. He explained that the area is currently a business hour district and in order to be a successful urban environment better access to the Streets of Tanasbourne to help strengthen it is crucial.

- Brian (OHSU) requested more information about the size/square footage of the parcels. He asked Bill for insight on parcel size for urban development.

- Laura (KG Investment) brought up the point that it’s hard to allocate the cost of improvements (bio swells, etc) and asked how that would be handled with future developers. Mimi (CardnoWRG) talked about the opportunity to merge natural area mitigation efforts with sustainability efforts and build that back into public financing; the cost benefit would be substantial. Paige (COH) added that the city will submitting a request to the EPA for Smart Growth Assistance which would help identify opportunities and constraints for integrating public and private systems (storm water management, energy production, etc). She pointed out that the district has been coined the “regional model for sustainability” and if we are successful in pursuing this, it will put substance behind this claim and the district will become an example for other communities on the region.

- Brian (OHSU) expressed that there are a lot unanswered questions relating to the street network and who’s responsible for the costs. Don (COH) responded that it is something that will need to be looked at as refinements are made in the future.

- Colin (COH) discussed an earlier conversation with Principal Financial Group where it was stressed that more specific information was needed on what the land use designations were (densities, etc). He expressed that more clarification would be given at the next meeting, along with the issues and questions raised at this meeting. He thanked everyone for their participation and attendance. The next meeting will be May 13th.

Discussion Summary prepared by Molly Berman, City of Hillsboro Planning
Discussion Summary - AmberGlen Community Plan
Technical Advisory Committee, June 24, 2009

Committee Members Present:
Jillian Detweiler, Tri-Met
Jennifer Garland, Beaverton School District
Steve L. Kelley, Washington County, Planning Division
Gregg Leon, Washington County, Planning Division
John Rinier, City of Hillsboro, Fire Marshal
Henry Reimann, City of Hillsboro, Police Lieutenant
Kevin Smith, City Of Hillsboro, Parks & Recreation
Ryan Van Gordon, NW Natural
Stu Davis, Tualatin Valley Water District
Chris Deffebach, Metro
Karen Frost, Westside Transportation Alliance
Ken Malone, PGE
Meg Fernekees, DLCD
Carrie Pak, Clean Water Services
Ludweien Rahman, ODOT (for Marah Danielson)

Interested Parties Present:
Ramsey Weit, Community Housing Fund
Tom McConnell, TMC Planning
John Hartsock, Beaverton School District

Project Team Members Present:
Colin Cooper, City of Hillsboro Planning Dept
Paige Goganian, City of Hillsboro Planning Dept
Don Odermott, City of Hillsboro Planning Dept
Alwin Turiel, City of Hillsboro Planning Dept
Doug Miller, City of Hillsboro Planning Dept
Molly Berman, City of Hillsboro Planning Dept
Mimi Doukas, CardnoWRG
Michael Cerbone, CardnoWRG
Ryan Givens, CardnoWRG
Bill Reid, Johnson-Reid
Scott Harmon, DEA

I. Overview
Colin Cooper (COH) welcomed the Technical Advisory Committee members and noted that discussion will focus on Johnson-Reid’s work on economic feasibility, related refinements to the development program and map, and Draft Land Use Policies.
II. Presentations/Discussion

**Presentation: Economic Feasibility - Retail Capacity Analysis**

Bill Reid of Johnson-Reid summarized his analysis of proposed retail capacity within the Community Plan area provided in his Memorandum dated May 12, 2009. He reviewed the methodology beginning with measuring current retail capacity for the City of Hillsboro to identify gaps that could provide opportunities for new retail offerings. Bill explained that additional retail capacity likely exists for several market types including furniture and furnishings, electronics and appliance stores, clothing and apparel stores, and restaurants and dining. Next, he said the amount of retail demand that would be generated by the future residents of the AmberGlen Community at full build out of 4,000 to 6,000 new residential units was estimated and indicated that if AmberGlen residents allocated an optimistic 75% of their spending within the Community, demand for approximately 300,000 to 450,000 square feet of retail space would be generated. If AmberGlen residents allocated 50% of the spending to local stores there would be a need for about 200,000 to 300,000 square feet of retail space. Finally, if residents bought only 25% of their goods in the community, there would be a need for about 100,000 to 150,000 square feet of retail space. Bill noted that these figures are significantly less than the retail capacity called for in the Phase I plan, and the estimates should be useful in establishing a policy to strategically position the area as either additional regional shopping capacity or as a self-sustaining community shopping area. He also noted that his memo discussed the impact of planning policy in attracting the types of retail that might be most appropriate for the AmberGlen community. He based his analysis on prior work examining how proximity to employment, parks and commercial amenities influence home buyers’ decisions with commercial amenities being the most significant factor. Bill explained that people are usually willing to pay more for a home located near desirable amenities so that they don’t have to drive to them. A goal of the plan is to make the area a 16-hour community with a number of high quality amenities available to residents from early in the day to late in the evening.

**Presentation: Economic Feasibility - Viability Comparison of Mid-Rise & High-Rise Residential Development**

Bill reviewed the economic viability of the range of proposed development types. He explained that per square foot construction costs increase dramatically as building height goes beyond certain levels. The cost to construct low-rise structures up to four stories is relatively inexpensive and currently costs about $120 per square foot. Mid-rise (4 to 6 stories) construction costs increase to $167 per square foot because of the expense of required light-weight steel. High-rise (7 or more stories) costs increase dramatically to $212 per square foot due to the increased cost of high-load steel and structured parking. As expected, the sale price for residential units increases in proportion to construction costs. An average recent sales price of $140 per square foot for new construction in Hillsboro indicates that low-rise is the most feasible development type. Bill conducted a static pro forma analysis on the mid-rise and high-rise development types for comparison. He concluded that the indicated viability gap for the “baseline” scenario without amenities is not financially feasible due to the high negative return on cost. However, the viability gap for mid-rise construction in the second scenario that includes premiums for park space and commercial amenities is nearly feasible depending upon the developer’s risk/return requirements. Bill said he was encouraged by the findings and he felt that mid-rise could be viable for the AmberGlen area in the near future.

**Discussion**
Chris Deffebach asked how the price of land impacted the model. Bill replied that it is a static model, but if land prices do rise, home prices should also increase. He said that the trick is to make the area attractive enough so that home values increase faster than land values.

Carrie Pak asked if public utilities are taken into consideration. Bill said that he assumed all on-site improvements are built by the developer and that offsite improvements are already in place. Colin said staff would check the existing conditions report to verify that sufficient offsite utility improvements are in place.

Chris Deffebach asked if the analysis included the cost of offsite improvements. Bill replied that it does not.

Steve Kelly asked if the analysis included structured parking. Bill replied that it does not, but if may be considered in the future.

Jillian Detweiler asked if the analysis would change if apartments were included rather than all ownership units. Bill said that apartments might be a little more challenging to make pencil out, but not dramatically because the land/pricing relationship is similar.

Jillian said that she appreciates the amenity analysis, and asked if it assumed a base level of pedestrian amenities. Bill said not explicitly.

Jillian asked if Bill knew how a place like Bellevue Washington happens. Bill surmised it is likely due to adjacency to the Microsoft campus and the transportation issues between Bellevue and Seattle. He felt the suburbs of Vancouver, B.C., like Surrey and Richmond, might be better comparisons.

Jillian said that she is worried about too much homogeneity in the plan’s product type and a rush to build everything out at mid-rise condos. Bill said that the intent is not to recreate the Pearl District in Hillsboro. Bill said that based on his experience doing feasibility analysis for projects in Portland, he thinks there is a built-in market for the AmberGlen Plan. Many Westside employees would love to live closer to their work. The challenge is to provide desirable amenities within a suburban environment. Colin said that he had recently visited Bellevue to see what he could learn. He saw some 40 story projects going in and was curious what the catalyst projects were.

**Discussion**

Kevin Smith asked why the retail corridor wasn’t placed next to the park. Kevin mentioned he is concerned about too much retail dispersion. Michael Cerbone said that it is important to double load...
retail blocks, so moving one block west made more sense. Mimi said that demand for retail might eventually reach out toward the park from the corridor. Colin agreed that retail could evolve across from the park.

Steve Kelly asked if the retail analysis included visits from people living outside the plan area. Michael said that some visitors were added, but the projected space requirements still dropped from 800,000 square feet to 300,000 square feet.

Chris Deffebach asked if this would leave retail capacity growth for the rest of Hillsboro. Bill said that it would reduce the long-term need, but not enough to cause concern. He also clarified that his retail analysis for the plan area only included AmberGlen residents. Mimi said that the 185th Neighborhood Center was a completely different market area and it was not included in Bill’s analysis.

Carrie Pak asked if there were natural resources located in the some of the areas designated for retail. Michael said no, that the resource areas have been protected. Colin added that at the design stage, natural systems will be integrated and preserved. He said that the goal is to make the area a sustainable showcase.

Michael mentioned that one of the changes made earlier was to move the high density areas out one block further from the park. This was done because mid-rise is more financially feasible and likely to happen early on to help catalyze the project. Bill said that this will also preserve park views for the mid-rise developments in addition to the high-rise.

Presentation: Draft Land Use Policies

Michael presented slides showing the target mix of uses for each development type and the target floor area ratios. He emphasized that the targets are not maximums, but averages for the overall area. Therefore, some buildings may have a higher FAR than the target and some may have a lower FAR. The same idea applies to the target mix of uses.

Mimi discussed the Medium Density Transition development type. It has a minimum FAR of .65 and a target of 1.0 and a minimum height of 3 stories and a maximum of 4 stories. She said that it is intended to create development forms that respect the existing neighborhoods – hence the term “transition”. The density range will encourage a diversity of housing types – it won’t be all townhomes. There will be a strong set of design guidelines. Jillian asked how that would play out in the area along 185th. Colin replied that most of the area has already been permitted for development. There is a 406-unit development slated to go in at 30 units per acre. There is a very limited amount of developable land left along 185th to work with at this point.

Michael said the Medium Density Urban is intended to be a step up from the Medium Density Transition development type. This is the most common development type in the plan area. It has a minimum FAR of 1.0 and a target of 1.5 and a minimum height of 3 stories and a maximum of 6 stories. It will likely be a mix of rental and ownership. He said the High Density Urban has a minimum FAR of 2.0 and a target of 3.0 and a minimum height of 3 stories and no maximum height.

The Urban Activity Center is intended to be the heart of the area with both civic and retail components. It has a minimum FAR of 1.5 and a target of 2.0 and a minimum height of 3 stories and no maximum. The Quatama Neighborhood Center is primarily a commercial area with a minimum FAR of .7 and a target of 1.0 and a minimum height of 2 stories and a maximum of 6 stories. The 185th Avenue Neighborhood Center is a transitional area designed to fit in with the existing area. It has a minimum FAR of .4 and a target of .65 and a minimum height of 2 stories and a maximum of 6 stories. The Office/Mixed Use areas are primarily employment sites with a minimum FAR of .6 and a
target of 1.0 and a minimum height of 2 stories and a maximum of 8 stories. The Civic and
Institutional areas are intended to be campus-like settings with a minimum FAR of .4 and no target
FAR and a minimum height of 2 stories and a no maximum.

Michael presented a spreadsheet comparing the land use mix in Phase I with the mix in the latest
proposal. The overall amount of retail square footage has been reduced by about 300,000 square
feet, the amount of office use remains about the same, and the residential use is increased by about
2 million square feet.

Discussion

Jillian said that 74 dwelling units per acres seems low as a target for high density, but it might be
helpful in avoiding opposition to the plan due to density issues. Chris Deffebach wondered if the 74
dwelling unit per acre target could ever be achieved.

Carrie Pak asked if there had been any consideration of an FAR credit for green roofs. Colin said yes,
the City has adopted mixed use district code provisions which provide bonuses for use of sustainable
development methods. Carrie asked how the City intends to keep track of the uses in the area. Will
the last development that goes in be forced to make up the difference in order to achieve the
targets? Michael said that this would be a City policy choice. Colin said that this is always difficult
and the City is likely to look at using performance based targets.

Karen Frost mentioned that the City of Portland offers FAR bonuses for bike parking and day care.
Colin replied that these are all things that should be considered and he would like to hear about
more of them from the group. Michael said that structured parking is included when calculating FAR.
Jillian said the team should be concerned about using FAR bonuses to achieve critical functions such
as bike parking, since there may never be a demand for the high FARs. She suggested using other
mechanisms to achieve the critical functions. Colin agreed and said that he recently had a similar
discussion regarding public art.

Jillian asked if all the high density parcels are currently developed and if so, could at least one
vacant parcel be given a high density designation. Ryan said that the Oregon Graduate Institute site
could be considered vacant because it is likely to redevelop. Jillian asked if there was a site between
Quatama station and forested site along Wilkins that could allow, but not necessarily require high
rises. This would support the retail in this area and avoid conflicts over park views. She said that the
most challenging development type has been put on the most challenging parcels. She would like to
allow for one high rise to be built easier.

Meg Fernekees said that she thought that the Phase I plan had more residential units than this
version. Colin said no, the old plan only called for about 4,800 residential units.

Jillian said she would be concerned about some elements of the plan if the City were not considering
urban renewal. She feels there is a need for developer agreements or some other vehicle that ties
public investment to higher densities. She feels the zoning code may not be the best way to
accomplish the goals set forth. Mimi said that this is a complex district that will require a complex set
of tools. Jillian asked what the deadline is for submitting written comments. Colin asked that items
be submitted by the end of July.

Steve Kelly said that he likes the access spacing on the arterials, he likes the east/west connection
of Wilkins and he also the east/west connection of Walker. However, he would like to see 600 feet of
spacing maintained along Walker near the Urban Activity Center.
Presentation: Transportation Update

Don Odermott, City Transportation Engineer said that there are three key mobility corridors in the plan area: 185th Ave, Cornell Road, and Walker Road. He reviewed Metro’s latest High Capacity Transit plans by presenting a map of the proposed HCT routes. He pointed out that route #17D would extend MAX light rail into the AmberGlen Plan area, the Tanasbourne area, and up into the northern industrial employment areas. Route #17 would extend light rail out Hwy 26 from the Sunset Transit Center to the Hillsboro industrial areas along the Evergreen corridor. Unfortunately, Route 17D did not score well on its own; however, Metro was persuaded to combine #17 and 17D for future funding analysis.

Don reminded the Steering Committee that the state’s Transportation Planning Rule (TPR) requires us to identify the transportation impacts of proposed changes to area land uses based on the proposed AmberGlen Community Plan and to come up with ways of funding solutions to those identified impacts. This was not done in Phase I, but will need to be done in Phase II. Don said that the current zoning would allow for about the same number of jobs proposed in the latest AmberGlen Plan. Since current zoning does not allow much residential development, all the TPR impacts are due to the large increase in the number of dwelling units that would be generated by the plan.

Don said that 185th is 45% over capacity without the AmberGlen Plan. So doing nothing is not an option. Scenarios of road and transit changes in land use, connectivity, transit service will be tested to see the effect on mode split. The extension of Wilkins and Stucki are assumed, but we will test what is the impact if it does not happen. A Hwy 26 fly-over of John Olsen Road will be tested. Five traffic modeling runs will be conducted through Metro to determine the physical road or transit improvements necessary to meet the standards. Costs associated with those improvements need to be estimated and the funding sources identified. An Interstate Access Management Plan will be created to come up with a solution for the Hwy 26 Interchange impacts. He said that the lifeblood of the County is the arterial system, so we need to keep them moving.

Discussion

Karen Frost mentioned that 185th was estimated to need 9 lanes in the prior plan analysis and she wanted to know if that had changed. Don said that 185th is currently 5 lanes south of Cornell and north is 8 or 9 lanes. The hope is that with investments in transit, there won’t be a need to add lanes.

Lidwien Rahman asked if the base case is the existing Comp Plan or is it the Phase I plan. She also asked what the increment in jobs and housing is between the Comp Plan and the Concept Plan. Don said that the 2035 Metro model effectively uses the Comp Plan. The net difference between it and the latest AmberGlen Plan is 6,886 housing units. Since the job capacities are about equal, there is no significant change proposed for employment. Lidwien asked Don to come in to see her and present the calculations on paper so that ODOT can be comfortable with the methodology.

III. Closing

Paige thanked the Technical Advisory Committee and said that the next meeting will be in September. We are hoping for plan adoption to occur in the fall. The next meeting will address funding mechanisms and transportation. Also a draft document will be available.
Discussion Summary - AmberGlen Community Plan

Steering Committee, June 24, 2009

Persons Present
Jillian Detweiler, Tri-Met, Land Development Planner
Brian Newman, OHSU, Director of Planning
Scott Harmon, David Evans & Associates, Transportation Engineer
Bill Reid, Johnson-Reid, Principal
Wink Brooks, alternate for Rob Dixon, City of Hillsboro
Neisha Cameron, Hillsboro resident
Willy Paul, Kaiser Permanente
Brad Farmer, Parr Lumber
Marvin Lamascus, Walker Road resident
Laura Gentry, KG Investment
Jay Fisher, Principal Financial
Deborah Huff, The Standard
Matt Baker, Franklin Properties

Project Team Members Present
Colin Cooper, City of Hillsboro, Current Planning Manager
Paige Goganian, City of Hillsboro, Urban Planner III
Doug Miller, City of Hillsboro, Urban Planner II
Molly Marriott, City of Hillsboro, Planning Technician II
Don Odermott, City of Hillsboro, Transportation Planning Engineer
Michael Cerbone, CardnoWRG, Planning Project Manager
Mimi Doukas, CardnoWRG, Dir. of Land Use Planning
Ryan Givens, CardnoWRG, Senior Community Planner

I. Overview

Hillsboro Planning Manager Colin Cooper welcomed Technical Advisory Committee (TAC) members and thanked them for participating in the AmberGlen Area planning process. Cooper gave a brief review of the Phase II planning process and emphasized that the primary goal of this phase is to refine the work done in Phase I - OHSU/AmberGlen Concept Plan (March 2007), Stakeholder Alternative (September 2007) and comments received at the Joint City Council/Planning Commission Work Session (February 17, 2009).

II. Presentations/Discussion

Presentation: Economic Feasibility - Retail Capacity Analysis

Bill Reid of Johnson-Reid presented an analysis and findings of the retail capacity as well as an analysis of the viability of the proposed residential development types. He first measured the current retail capacity within all of Hillsboro to see if there are any gaps that could provide opportunities for
new retail development. Bill referred to his memo to Colin Cooper dated May 12, 2009 showing that additional retail capacity likely exists for several market types such as furniture and furnishings, electronics and appliance stores, clothing and apparel stores, as well as restaurants and dining.

Bill then looked at the amount of retail demand that would be generated by the future residents of the AmberGlen Community at full build out of 4,000 to 6,000 new residential units. He said that if AmberGlen residents allocated a very optimistic 75% of their spending within the Community, a need for 300,000 to 450,000 square feet of retail space would be generated. If AmberGlen residents allocated 50% of the spending to local stores there would be a need for about 200,000 to 300,000 square feet of retail space. Finally, if the residents bought only 25% of their goods in the community, there would be a need for about 100,000 to 150,000 square feet of retail space.

Bill said that these figures are significantly less than the retail capacity called for in the Phase I plan and that the estimates should be useful in establishing a policy to strategically position the area as either additional regional shopping capacity or as a self-sustaining community shopping area. Bill mentioned that his memo discusses the impact of planning policy in attracting the types of retail that might be most appropriate for the AmberGlen community. He based his analysis on prior work done for Metro that looked at how commercial amenities influence home buyers’ decisions: they are usually willing to pay more for a home located near desirable amenities, such as specialty grocers, so that they don’t have to drive to them. A goal of the plan is to make the area a 16-hour community with a number of high quality amenities available to residents from early in the day to late in the evening.

Presentation: Economic Feasibility - Viability Comparison of Mid-Rise & High-Rise Residential Development

Bill reviewed the economic viability of the range of development types proposed for the AmberGlen community in Phase I. He explained that per square foot construction costs increase dramatically as building height goes beyond certain levels. The cost to construct low-rise structures up to four stories is relatively inexpensive and currently costs about $120 per square foot. Mid-rise (4 to 6 stories) construction costs increase to $167 per square foot because of the expense of required light-weight steel. High-rise (7 or more stories) costs increase dramatically to $212 per square foot due to the increased cost of high-load steel and structured parking.

As expected, the sales price of residential units increase in proportion to construction costs. An average recent sales price of $140 per square foot for new construction in Hillsboro indicates that low-rise is the most feasible development type. Bill conducted a static pro forma analysis on the mid-rise and high-rise development types for comparison. He concluded that the indicated viability gap for the “baseline” scenario without amenities is not financially feasible due to the high negative return on cost. However, the viability gap for mid-rise construction in the second scenario that includes premiums for park space and commercial amenities is nearly feasible depending upon the developer’s risk/return requirements. Bill said he was encouraged by the findings and he felt that mid-rise could be viable for the AmberGlen area in the near future.

Discussion

Colin asked if Bill had looked at the impact of employment within the plan area on retail purchases. Bill said no, but employment within the area would certainly bolster retail purchasing.

Laura Gentry asked if proximity to specialty grocers is important – should they be located in the center. Bill said that being within a few 1.5 blocks is important.
Brian Newman asked what information source was used to get the $10 per square foot land value used in the pro forma analysis. Bill replied that the figure was based on current assessor’s records for real market value and that this source was used because it is consistent and publicly available. However, he also said that due to the source the land value may be a bit low. Brian Newman also asked how Bill got the $140 per square foot average sales price for new construction in Hillsboro. Bill said that the sales price came from local comparable sales within the last 6 months.

Wink Brooks asked if the prices included structured parking. Bill replied that they did not include structured parking. Colin Cooper mentioned that the transportation modeling that is currently underway assumes structured parking due to the Metro policies for regional centers.

Brian Newman asked if the construction costs used in the analysis included soft costs, i.e. design, engineering, overhead, etc. Bill replied that typically they are included in total construction costs.

Mimi Doukas asked Bill to discuss the impact of timing. Bill said that it is important for the City to try to attract development of catalyst projects to jump start the plan. He said it is probably best to begin with mid-rise. As successful projects are built and if urban renewal can help fund infrastructure, high-rise construction may become feasible in the long-term. Bill said that he feels there is a built-in market of buyers for this type of product based on his market analysis of Portland development proposals. Employment near the plan area has the highest per job income in the metro region and there are probably many workers at Intel, Nike, and other high tech companies who would prefer to live close to their jobs if there was a community that offered some of the amenities of downtown Portland.

Jillian Detweiler said that she was happy to see such a thoughtful strategy on how to influence the market to create a successful community. She noticed that the minimum density for the high density zone was the same as the medium density zone which she felt would allow flexibility by not setting the bar too high for high-rise developers. She also recommended that any discussion of urban renewal include a goal of diversifying the selection of housing types. She felt that developing too many condos would create an unsustainable housing mix for the community.

Deborah Huff asked if the project team’s approach was to avoid making the same mistakes that were made in South Waterfront where values have tanked. Bill said that Metro’s Transit Oriented Development program is great because it seeks to make a district more attractive rather than just sitting down with individual developers and offering them assistance. Colin mentioned Bill’s prior memo discussing market weakness at South Waterfront due to its isolated location and lack of a mix of amenities. AmberGlen’s advantage is already having a lot of great jobs, retail, and rooftops nearby, so you have a lot more to work with right off the bat.

Wink Brooks asked if there was going to be a strategy that comes out of this process. Colin replied that yes, there would be a phasing strategy, memorandums of understanding with property owners and regional partners.

Matt Baker asked if there would be an urban renewal plan. Colin said that an urban renewal analysis would the next step in this effort.

Brian Newman said that he felt there was a lot of excitement about the plan and yet there was also nervousness about what will be required to attract the amenities envisioned for the community. He suggested going back to look at what happened in the Pearl District to learn some lessons. Colin replied that Jillian provided him copies of the development agreements that were used in the Pearl District and that he intends to borrow from those models.
Ryan Givens of CardnoWRG reviewed the evolution of the Concept Plan and presented the updated Concept Plan map. He discussed the proposed changes from the previous version dated April 14, 2009. The Urban Center has been relocated to an area further south and west of the original location. This decision was based largely upon the findings from Bill Reid’s retail capacity analysis (discussed above) indicating that a community oriented retail model might be more appropriate for the plan area. The idea is to disperse the estimated 550,000 square feet of retail throughout the community by creating three or four small retail centers and a retail corridor one block west of the park in order to activate the neighborhoods.

Michael Cerbone presented slides showing the target mix of uses for each development type and the target floor area ratios. He emphasized that the targets are not maximums, but averages for the overall area. Therefore, some buildings may have a higher FAR than the target and some may have a lower FAR. The same idea applies to the target mix of uses.

The Medium Density Transition development type has a minimum FAR of .65 and a target of 1.0 and a minimum height of 3 stories and a maximum of 4 stories. It is intended to create development forms that respect the existing neighborhoods – hence the term “transition”. The density range will encourage a diversity of housing types – it won’t be all townhomes.

Michael said the Medium Density Urban is intended to be a step up from the Medium Density Transition development type. This is the most common development type in the plan area. It has a minimum FAR of 1.0 and a target of 1.5 and a minimum height of 3 stories and a maximum of 6 stories. It will not be all townhomes, but a mix of rental and ownership. He said the High Density Urban has a minimum FAR of 2.0 and a target of 3.0 and a minimum height of 3 stories and no maximum height.

The Urban Activity Center is intended to be the heart of the area with both civic and retail components. It has a minimum FAR of 1.5 and a target of 2.0 and a minimum height of 3 stories and no maximum. The Quatama Neighborhood Center is primarily a commercial area with a minimum FAR of .7 and a target of 1.0 and a minimum height of 2 stories and a maximum of 6 stories. The 185th Avenue Neighborhood Center is a transitional area designed to fit in with the existing area. It has a minimum FAR of .4 and a target of .65 and a minimum height of 2 stories and a maximum of 6 stories. The Office/Mixed Use areas are primarily employment sites with a minimum FAR of .6 and a target of 1.0 and a minimum height of 2 stories and a maximum of 8 stories. The Civic and Institutional areas are intended to be campus-like settings with a minimum FAR of .4 and no target FAR and a minimum height of 2 stories and no maximum.

Michael presented a spreadsheet comparing the land use mix in Phase I with the mix in the latest proposal. The overall amount of retail square footage has been reduced by about 300,000 square feet, the amount of office use remains about the same, and the residential use is increased by about 2 million square feet.

Don Odermott, City Transportation Engineer reviewed Metro’s latest High Capacity Transit plans by presenting a map of the proposed HCT routes. He pointed out that route #17D would extend MAX light rail into the AmberGlen Plan area, the Tanasbourne area, and up into the northern industrial employment areas. Route #17 would extend light rail out Hwy 26 from the Sunset Transit Center to
the Hillsboro industrial areas along the Evergreen corridor. Unfortunately, Route 17D did not score well on its own; however, Metro was persuaded to combine #17 and 17D for future funding analysis.

Don reminded the Steering Committee that the state’s Transportation Planning Rule (TPR) requires identification of transportation impacts of proposed changes to area land uses based on the proposed AmberGlen Community Plan and to come up with ways of funding solutions to those identified impacts. This was not done in Phase I, but will need to be done in Phase II. Don said that the current zoning would allow for the same number of jobs proposed in the latest AmberGlen Plan. Since current zoning does not allow much residential development, all the TPR impacts are due to the large increase in the number of dwelling units that would be generated by the plan.

Two important tasks in this process will be to satisfy ODOT which is charged with protecting the mobility of the highway system and Washington County which is responsible for protecting mobility on the arterial system. Performance standards must be met for each. Five traffic modeling runs will be conducted through Metro to determine the physical road or transit improvements necessary to meet the standards. Costs associated with those improvements need to be estimated and the funding sources identified. An Interstate Access Management Plan will be created to come up with a solution for the Hwy 26 Interchange impacts.

Discussion: Development Program Refinement / Draft Land Use Policies

Brian Newman commented that it would be nice to have more visuals showing what the targeted FARS would look like when built. A comment was made that it would be nice to find out what the FAR is of the Whole Foods development for an example and show a visual of it.

Matt Baker asked if the color on the land use map for the area located at 185th & Wilkins was changed to red at the request of the property owner. Michael said that, yes, the changes came from the property owner.

Brian Newman said that he thought that the previous location of the urban activity center across from the Streets of Tanasbourne made sense and he wondered why it is now proposed to be moved further west and south. Michael replied that there were several reasons:

- the overall amount of proposed retail space was reduced based on the Johnson-Reid retail capacity analysis;
- the existing buildings located in the previous Urban Activity Center are in very good condition and it would likely be a long time before they would redevelop into retail. In order to help catalyze the area with retail early on, it makes sense to move the Urban Activity Center to a site that could develop sooner;
- based upon the Johnson-Reid report, the most viable retail model for the plan area is the dispersed community oriented type as opposed to providing additional regional destination retail beyond the offerings already in Tanasbourne area.

Colin added that there may be a civic component added to the urban activity center.

Wink Brooks said that he feels it is important to maintain a strong connection to the Streets of Tanasbourne and that over the long term, with an improved Hwy 26 interchange and light rail, regional retail will be viable.

Marvin Lamascus mentioned that the central park size has been reduced from Phase I, and asked for a description of the open space areas in the current plan. Michael said that the large stand of trees along Wilkins in the west side of the plan area has been added to the proposed open space. Some City Goal 5 areas were also added. Colin said that a multi-use trail connecting to the Rock
Creek trail is planned for the area. Paige said that a series of bike/pedestrian trails will connect throughout the area. She also mentioned the possibility of providing protected bikeways that would allow for bicycle movement safely separated from auto and pedestrian areas by a curbs or plantings.

Wink Brooks mentioned that Phase I called for east/west greenway connections throughout the plan area. He asked if these would be included in the final plan. Paige said that the intent is to preserve those types of connections. Wink also mentioned that there were areas designated as potential school sites in Phase I. He asked if this was still being considered. Colin said that yes, there are representatives from Beaverton School District on the Technical Advisory Committee, but they have not proposed specific school sites within the plan area. Colin also said that people would like to see the school boundary change so that it conforms to the City boundary and that this idea is currently being looked at. Wink said that there was a strong “Green” component to the Phase I plan that included features such as green streets. Paige said that it is the intention to include the green concept in the final plan. Colin said that the term “sustainability showcase” has been used all along in Phase II to describe the Concept Plan.

Discussion: Transportation

Willy Paul mentioned that in a previous meeting there was a discussion about the difficulty of making the transition from the existing MAX line to the proposed light rail route extending into the plan area from the Quatama Station. He wanted to know if there had been any more discussion of this. Don said yes, and it is a challenging problem TriMet’s engineers will have to resolve.

Brian Newman said that he recalled Jillian Detweiler saying that the transfer could take place at the Willow Creek station. Don said that there has been quite a bit of discussion since the last meeting. Brian recalled in Phase I that the emphasis was on some sort of circulator bus/streetcar rather than High Capacity Transit. He wanted to know if it is still on the table and should it be considered as a “Plan B” just in case the HCT does not pan out. Brian reminded the team that he had requested the size of the plan parcels. Michael said that information is available and will be provided.

Deborah Huff asked if “Green” was in play for buildings, i.e. LEED. Paige said that we could use the LEED for Neighborhoods as an evaluation checklist and this could provide a branding opportunity. Michael said that we may want to use LEED as a carrot rather than a stick. Bill Reid said that his experience in other markets within the Intermountain West shows that it is best to create guidelines that capture the intent of LEED but does not unnecessarily burden developers with its cost.

Wink Brooks mentioned that he heard talk of a sustainability grant. Paige replied that the City has applied for an EPA Assistance Grant to look at opportunities in the plan area, but we do not know if it has been awarded yet. Wink mentioned that there may be opportunities for local energy management such as Beaverton’s electrical generator system located at The Round. It was mentioned that this would require a lot of ground work up front.

I. Closing

Paige said that the last Steering Committee meeting will be held in September. A revised schedule will be sent out next week. The intent is to have a public hearing in the fall and to adopt the plan by the end of the year. A Planning Commission/City Council work session is scheduled for August 4 to bring them up to date. She said that the focus of the next Steering Committee meeting will be on public funding mechanisms including urban renewal, transportation analysis, and a draft Community Plan document will be available.
An open house for the AmberGlen Community Plan (Community Plan) was sponsored by the City of Hillsboro Planning Department on June 25, 2009 from 5:30 to 7:30 p.m. The open house was held at the AmberGlen Conference Center located within the Plan area and was attended by approximately 25 people including local residents, employees, and other interested parties. The purpose of the Open House was to provide information on the market feasibility analysis, plan refinements, transportation planning, and draft land use policies. The June 25, 2009 open house was the second of three public events scheduled to occur during the Community Plan process.

INFORMATION PROVIDED

Michael Cerbone of CardnoWRG (project consultants) summarized analysis by project economists at Johnson Reid LLC on retail capacity within the Community Plan area, and on the market viability of proposed residential development. He noted that economic findings and comments by Community Plan area stakeholders provided the basis for reducing and reconfiguring retail space and for replacing retail designations with increases in employment and residential uses. Michael also noted that mid-rise residential development was found to be economically more viable in the short-term compared to high-rise forms, and that the central park and specialty commercial amenities provide proximate residential price premiums of 15% and 17.5% respectively. He identified plan refinements to relocate mid-rise residential development adjacent to the central park on undeveloped parcels with buildings stepping back to high-rise redevelopment to occur at a future time when existing improvements depreciate in value relative to land prices. Michael closed by reviewing draft policies for land uses identified in the refined AmberGlen Community Plan.

Don Odermott, Transportation Planning Engineer for the City of Hillsboro gave an update on Metro’s High Capacity Transit Plan and the study corridors that affect the AmberGlen Community Plan area. He explained how transportation impacts were related to the skewed balance between jobs and housing in Hillsboro. He discussed how the City’s jobs-rich housing ratio was a primary reason for planning for significant housing in the AmberGlen area because it was close to major employers, linked by existing and planned transit, and located within the urbanized area. Don explained that the transportation system in the area is over capacity under the current zoning and emphasized the necessity of identifying transportation system improvements for current conditions and for added demand created by the Community Plan. Funding sources include development exactions, traffic impact fees, and the Major Street Transportation Improvement Program (MSTIP). He noted that the MSTIP is the most robust funding source for needed improvements. Don reported that modeling of transportation investment scenarios is underway to test the effects of area build-out, increased density due to proposed zoning amendments, and a range of transit and roadway improvements with associated costs. He explained that the work will inform Community Plan stakeholders and policy-makers by establishing a financial target for transportation investments, and identifying system costs under current zoning compared to costs specifically associated with Community Plan impacts.

QUESTIONS AND COMMENTS

Questions and comments received by participants and project team members’ responses are provided below. (Q. = Question; C. = Comment; R. = Response)

Q. What is the maximum height limit?
R. Height limits will be established by zone amendments following adoption of the land use policies identified in the Community Plan. Higher density development heights are expected to be largely determined by the market.
(Nota: Current SCBP and SCRP zoning standards allow development up to a maximum of 75’ based on 5 stories at 15’ per story. Draft land use policies do not establish maximum heights for ‘High Density Urban’ and ‘Urban Activity Center’ designations. Draft land use policies propose minimum height thresholds of three stories with development targeted for around 6 to 8 stories)
based on the target floor area ratio of 3. Several point towers are envisioned for the ‘High Density Urban’ designation. The majority of development within the Community Plan area is envisioned to be 3 to 6 stories for Medium Density Urban designations.)

Q. Is the idea of the plan to go in the direction of Vancouver B.C.?
R. Vancouver is a great example. The idea is to recognize some of the trends that people are looking at and provide them with different options and alternatives for living (i.e. quality higher density living vs. single family home).

Q. Do you have any schools planned? The development target for 6,686 households equals six elementary schools, one to two junior high schools and one high school.
R. There are no specific school sites identified but schools may be developed under draft land use policies as conditional uses. Property in the plan area is currently owned by the Beaverton School District and is being master planned for their future needs. A representative from the Beaverton School District sits on our Technical Advisory Committee. The majority of the district is within the Beaverton School District boundary. City policy makers have expressed that they would like to explore options for adjusting the boundary line.

Q. Doesn’t the master plan have 185th as the eventual dividing line between Hillsboro & Beaverton School Districts? It is bad planning, especially if you’re in the early stages, to mix the city with other school district boundaries.
R. The school district boundary has been there for many years. District boundaries bear no real correlation to city limit boundaries (i.e. Tualatin Valley Water District). As noted, this idea has been brought up by our policy makers and will be explored further.

Q. Existing citizens will be saddled with costs and impacts. Who supports this and what is the driving force for adding an additional 2,000 dwelling units to the revised plan?
R. Envisioned urban quality development is supported by our City Council and Plan area property owners and stakeholders. A key public goal is to provide an urban housing option with high densities close to employers, and to achieve densities that will support high capacity transit and urban amenity retail businesses. Property owners have expressed a desire to maximize development opportunities.

Q. Is this just a business decision made without considering quality of life?
R. It is about the quality of life and choices. The intent is to create an environment that supports a high quality of life and provides choices for people who want to live in an urban environment on the west side.

Q. Won’t the taxpayers carry the financial burden of widening roads like Walker, Baseline & 206th to accommodate the density?
R. There is a cost share of the burden with any development. The plan with this district is to have the district itself pay for the infrastructure improvements with possibly urban renewal or other financing mechanisms that the City Council has suggested we explore further.

Q. Are there 1 or 2 property owners or a whole group?
R. There are approximately eight primary owners with Oregon Health Sciences University (OHSU) and Principal Financial Group controlling a significant amount of land within the plan area.

Q. What about the residents who live on the edge, outside of the district – do they get sucked into paying for the improvements?
R. The City of Hillsboro does not have a history of extending a burden to those that aren’t reaping the benefit. Oregon statutes set limits on how urban renewal district boundaries can be drawn, who benefits from funded projects, etc. Tax increment financing (urban renewal) could be used to fund the majority of the improvement costs. The funding has not been decided yet. That will be one of the next steps and it will be an open, public process.
Q. Please include in the transportation modeling at least 10-15% more housing for redevelopment in the residential areas south of the district.

R. The City now has the capability in-house to include redevelopment scenarios like this and will be running these kinds of scenarios in the transportation model.

Q. If we already have difficulties with mobility under current conditions, why are we adding over 6,000 more units? People in this district are not going to stay within the boundaries of the plan area – they are going to burden the areas the district as well. (Additional comment that the reason is that Principal Financial, being an out-of-state owner, doesn’t care about local impacts.)

R. The City is required to consider where to locate projected additional growth driven by job supply. Transportation system requirements are addressed as part of the planning process.

(Comment from public to open growth boundary and let growth occur north of US-26)

R. We are short in housing close to employment. We need to create choices for denser, urban residential living and carefully consider the impacts of future expansion.

Q. It is a sustainable solution to put the people next to the jobs so you can decrease their commute given lower fuel costs? It is currently difficult to get down to the Quatama station as a pedestrian, are you going to improve the pedestrian connections: bikes lanes on 206th and other types of pedestrian lanes?

R. Yes. A component of the plan’s transportation framework is the alternative modes system. Protected bicycle tracks, completing the Rock Creek Trail system, etc are addressed by the Community Plan.

Q. Is the 17B High Capacity Transit (HCT) corridor (identified on Metro’s Regional High Capacity Transit System Plan) intended to be a connector route to get to Evergreen and employers to the west such as Intel and Solar World?

R. Yes.

Q. Is anybody still talking about the Westside Loop that was looked at a few years ago? This legislative session David Edwards was supporting Highway 47 as a possible Westside corridor – has that faded away?

R. There are still supporters for the Westside Loop. The problem is that the corridor was not protected, and at the regional level, many think the issue was resolved back in the 1990’s. We are currently facing the same challenges that were being debated in the mid ’90s. Metro is ready to adopt their Regional Transportation Plan update with a set of road improvements which were based on a 2020 forecast. The City is trying to submit our projects, but we are working within a constrained budget and unfortunately the politics tend to be “Portland-centric” – we are facing an uphill battle. The City now has the in-house ability to look closer at different scenarios and introduce the information into the transportation conversation at the regional level.

Q. Where does the growth come from?

R. Metro projects the addition of one-million people to the region in the next 20 to 25 years. How much each county receives depends on where the housing will grow – it is projected that around 400,000 will come to Washington County. (The average multiplier is 2.5 persons per dwelling unit.) This brings up the debate of where to put them: the open farmland or stack them vertically? Hillsboro’s approach is to find a balance between the two by pursuing a comprehensive planning approach: Develop and adopt plans for higher densities in AmberGlen, Downtown Hillsboro and South Hillsboro, support appropriate infill throughout the city, strategic expansion of the UGB, and designation of Urban Reserves.

Q. In terms of the residential buildings, what percent are rentals and what percent are owned? Does the City currently allow buildings as tall as envisioned in the AmberGlen Community Plan? Will development feature green building practices or LEED construction?

R. We don’t envision any policy that will determine how much of a building will need to be rented vs. owned – it will be up the individual property owner.

The zoning code currently does not allow anything as high as envisioned in the High Density Urban designations within the district (seven stories and taller with no height limit and the
opportunity for point towers). Draft land use policies presented earlier could be revised by the City Council to include a maximum height based on feedback received by the public.

One of the primary principles of this plan is to make this District a “Sustainable Showcase”. Staff intends to take advantage of technology available in Washington County (i.e. Solar World) and promote as many best development practices as possible.

Q. Is Kaiser planning on building another hospital in this area?

R. Yes. Kaiser Permanente broke ground on a $360 million Westside Medical Center last week on 14 acres just north of the plan area.

Q. Have you done studies to find out if there are people in Washington County who would want to live in a high-rise building? You can’t compete with the urban environment of Downtown Portland (example of failure of the Round in Beaverton).

R. People are willing to pay and live in a mid-rise building today. A lot of people are commuting from Portland to their jobs in Washington County and some of those people will chose to pay a higher premium to live in this type of urban environment closer to their employer. Fifteen years ago, the Pearl district was far more comparable to densities in parts of Hillsboro today. Nike, Intel and other high-tech employees buy in downtown Portland because there is nothing comparable in Washington County. These employees and older people interested in downsizing provide a ready market for an urban option.

Q. What are the times for the City Council and Planning Commission work sessions? Are they televised?

R. The joint City Council and Planning Commission work sessions identified for August 4 and September 15 (tentative) generally begin immediately after the regular City Council meeting, around 8 to 8:30pm. They are a great opportunity to learn more about the Plan and to hear their questions – they ask the same questions that you are asking. The work sessions are held in a room that is not televised.

Q. The Pearl District was created because someone had a vision. This type of project requires a visionary thought process and you show a remarkable amount of patience as you are trying to describe this because people are resistant to change. People will come here because the population will grow by a great amount in Washington County. The Pearl District is heavily contaminated and people are still willing to pay a high price to live with the risk. This is a clean, pristine area. If you truly are going to be visionary and plan for the future, are you also going to take into account needs of the future like electric plug-ins for cars?

R. We intend to promote the range of efficient innovations in the AmberGlen plan area to support the goal for creating a “sustainability showcase”. The City has already required the new Intermodal Transit Facility in Downtown Hillsboro to have electric vehicle plug in stations and Hillsboro Sustainability Coordinator Peter Brandom is currently looking at sustainable demonstration projects in Downtown Hillsboro.

Q. Are these meetings designed to get public input on what you’ve already decided or is there opportunity to get public input so citizens can say “no we don’t want this”?

R. Nothing is a done deal. There are many people who have been involved in this vision for several years and think this is a good idea and important for effectively handling projected growth. This meeting is intended to inform you and to provide an opportunity to receive and document your questions and comments. These meeting notes will be forwarded for consideration by the Planning Commission and City Council. Adoption of the AmberGlen Community Plan targeted for this fall. The Community Plan process includes refining the original work and vision established by the 2007 Concept Plan by “ground-truthing” plan concepts to ensure economic viability and stakeholder support, and by developing data required to effectively address transportation requirements.
Q. What is the approval process? Who makes the decision? What do you recommend for public testimony that would have the best impact?

R. The process is outlined in the handout (Area Planning Timeline). We recommend you learn about the AmberGlen Community Plan, review plan documents, observe public work sessions (public testimony is typically not received at work sessions) and participate in the third and final open house scheduled for September 17, 2009 prior to the start of the public hearing before the Planning Commission. Contact Paige Goganian, Project Coordinator to obtain materials or to provide written comments as a follow-up to this open house. You can also refer to the project website http://www.ci.hillsboro.or.us/Planning/OHSUAmberGlen.aspx

All public meeting minutes and comments go to the City Council and Planning Commission for their review. Most importantly, provide written and/or oral testimony at the public hearings. The adoption of the Community Plan requires a Comprehensive Plan amendment and will be first be considered at a public hearing before the Planning Commission. The Planning Commission will consider testimony and make a recommendation to the City Council (it probably will take more than one meeting). The Planning Commission will listen to you and ask all the tough questions. City Council has the final say regarding adoption of the AmberGlen Community Plan.

Q. Is there going to be a public vote on the funding issues or anything like that? It seems things are already set.

R. It is not set at all. Important questions regarding transportation system requirements and funding for plan proposals still need to be addressed as the process moves forward. There are opportunities at the Planning Commission & City Council meetings (and at any City Council meeting, even if it’s not on the agenda) to voice your opinion on the project.

Q. As a long time neighbor, I really appreciate all the planning and work that is going into this. I was heavily involved in the 1982 efforts to move Cornell Road north. At the time, it was open fields and we couldn’t have imagined the change that occurred in 20+ years. Because there were plans put in place, we have had really good development – the industrial buildings have been beautifully done. I am pleased there is a plan being developed to guide future decisions. I know it has taken a lot of time and I commend you all.
Discussion Summary - AmberGlen Community Plan
City Council / Planning Commission Work Session, August 4, 2009

Participants

Mayor Willey,
Hillsboro City Council
Hillsboro Planning Commission

City of Hillsboro Planning Staff:
Colin Cooper
Pat Ribellia
Paige Goganian
Don Odermott
Doug Miller

Notes from Discussion:

• Welcome & Introductions by Mayor Willey

• Agenda items include a recap of February joint City Council/Planning Commission work session, an update on progress to date; plan refinements; transportation update and next steps. (Cooper)

• There were four main items of discussion at the February joint City Council/Planning Commission work session:
  1. Do we want to maintain the 7 Guiding Principles that came from the original plan (Urban Green, Third Places, Regional Landmark, Big: create catalyst at outset, Connectivity, Market Flexibility, and Model Development (Sustainable Showcase))? The answer was yes.
  2. Should the AmberGlen Plan area be combined with the Tanasbourne Town Center to create a regional center? Advantages such as priority for transportation funding mean that it makes sense to pursue this opportunity.
  3. Should we pursue bringing High Capacity Transit into the plan area? The answer was yes.
  4. Should we evaluate the use of public/private financing tools such as urban renewal and system development charges? The answer was yes. (Cooper)

• Other suggestions that came from the City Council/Planning Commission at the work session:
  ▪ The area must have economically vitality as a guiding principle.
  ▪ Should create a hybrid of the original plan and the "preferred alternative" created by the property owners.
  ▪ Create a distinctive community that is clearly part of Hillsboro.
  ▪ Hold to the timeline.
  All these items have been addressed and incorporated into the plan. (Cooper)

• Open houses were held in the plan area that have been very well attended. (Cooper)

• In response to feedback given at the February joint City Council/Planning Commission work session, we had our economic consultant Bill Reid of Johnson Reid conduct a feasibility analysis that first looked at the importance of the Central Park feature. The results showed that in order to be economically viable in the market, the AmberGlen

*This summary includes only a portion of the conversation from the work session. The comments and responses outlined above provide a summary of the discussion and are not verbatim.
Community Plan needs to be special and unique. Any successful development needs to have a strong amenity or basket of amenities in order to achieve premium prices. Johnson Reid’s analysis that compared existing neighborhoods in the region focusing on key amenities: 1) recreation and connection to nature; 2) access to employment; 3) commercial amenity retail. These features are considered the three legs of the economic feasibility stool. Johnson Reid said that the commercial amenity retail is the most important leg, so they did an analysis of the AmberGlen Plan’s proposed retail capacity to see if it was viable. They found that about 450,000 square feet of retail would be feasible for resident–supported demand at full build-out. (Goganian)

- Johnson Reid also looked at the viability of mid-rise and high rise residential development in the AmberGlen area. A pro-forma financial analysis showed that new mid-rise development comes close to “penciling out” when the amenities of a specialty grocer and a centerpiece park are included. Much of it depends upon a developer’s flexibility on expected rate of return (15% in the pro forma) and their perception of market risk. The economist’s recommendation was that it is within a feasibility range that makes it worth pursuing in the near term, whereas high rise feasibility is further out. (Goganian)

- How do you define mid-range and high-rise? (CC-Dennis)
  - Mid-range is up to 6 stories and high-rise has no height restriction. (Goganian)

- Building codes require using expensive steel construction when going above 5 stories. (PC-Roberts)

- One of the stated principles of the plan is to “go big” initially. Was any thought given to waiting until high-rise is market feasible rather than planning for mid-rise to go in first across from the central park? (CC-Dennis)

- To clarify, the pro formas were based on the expensive concrete/steel construction $167 sq/ft for mid-rise and $212 sq/ft for high-rise. (Goganian)

- Sound waves are stopped by concrete. The decision to go with concrete is the difficult decision; going up with more floors is an easier decision after that. (PC-Roberts)

- We didn’t want to have one big tower and one big park. The plan now calls for a big first step using mid-rise. We will forward the question to Bill Reid to get his response. (Cooper)

- How do you accommodate those who buy early and then lose their view later on? (Unknown)
  - The updated plan calls for the taller buildings one block away from the park which will help with the view issue. (Goganian)

- There will be another undeveloped site designated high density near the linear grove of trees for the High Capacity Transit. Stucki is the main north/south arterial because we want to keep the main traffic area out of the pedestrian areas. It may have the same treatment of a double alley of trees that makes Evergreen Blvd so distinctive. (Goganian)

- Bill Reid’s financial feasibility analysis looked only at residential type development and no office. It also looked only at ownership and no rental. (PC-Eyre)

- True, although there was an assumption of mixed-use. Bill used current construction cost data. (Cooper)

- The area across from the Streets of Tanasbourne is now Employment and the Urban Activity Center was relocated to the intersection of Walker Road and the potential HCT alignment. The hatched area on the map will be the retail focus area and will require retail on the ground floor. (Goganian)

- The park needs to be ample and the new park is about 400 ft wide by 1600 ft long which is not quite as large as the Phase I park. It will connect to the natural areas via green connectors as part of the urban green system. Access to nature, sustainability, and urban green will be the theme that is carried forward. Third places that fit with the character will be encouraged. The development program ends up with almost 7,000 dwelling units, office is about the same, and retail has been scaled back to about 550,000 square feet from the original figure of 800,000 square feet – based on the economic analysis. (Goganian)

- Was the change in park size due to anything in particular? (CC-Dennis)

- We tried to keep it the same but they were created under different assumptions. (Goganian)

- More linear frontage on the park means more park space access for the residents. (Odermott)

- We should really strive to make the area special. (CC-Dennis)
• What about the green hatched area? (CC-Johnson)

• They are the Cook residence and the Bates residence. The Bates site was purchased by OHSU and the City Parks department is looking at purchasing that site. The hatched areas are Significant Natural Resource Ordinance protected areas. (Cooper)

• How does this plan conform to the Parks department standards of 10 acres of parks per 1,000 residents?

• The Central Park is the minimum size for a community park. (Cooper)

• What is the plan southeastern green section of OHSU’s property? (CC-Johnson)

• OHSU sees that site as a necessary buffer to their ongoing operation. But the area could potentially be considered for a future park area. (Cooper)

• The key to getting big density is to have something special. A bigger park will be key to the long term viability of the plan. (CC-Dennis)

• The Central Park’s strong connections to the green spaces is better than having a few small parks. (CC-Johnson)

• Agree that the large Central Park is a strong amenity that is needed. (Unknown)

• The Central Park as shown on the plan is huge. Need to have pocket parks in the huge blocks too. (PC-Roberts)

• Agree that pocket parks and green connections are important in an urban area – look at the Pearl District. (Mayor Willey)

• The 6 story buildings are actually 8 due to 2 stories of parking, which is what is in the Pearl District. What staff has done is spectacular. (PC-Roberts)

• What is the acreage at the Faber Complex? (Unknown)

• The same distance of the blocks in downtown from 1st to 5th Ave or the South Parks Blocks in Portland. (Odermott)

• Something needs to make this place special –the green space would do it. (CC-Dennis)

• Would like to see the CC/PC go on a tour of the Pearl to get a sense of scale. (Mayor Willey)

• Lesson learned from a tour of successful suburban developments around Seattle and Vancouver B.C. was that you must push hard for the thing that will make the place special and successful. (CC-Dennis)

• One idea is to have a national or international design contest for the area. (Goganian)

• Opportunities have come along for transportation improvements. One was that we scored in the second tier for extending light rail into the study area. The other was that ODOT has asked for an Interchange Access Management Plan for the 185th / 26 Interchange which means ODOT is committed to moving ahead in considering funding the needed improvements. The Wilkins St. extension will be modeled to see what the effect of not having it does.
CITY OF HILLSBORO

Discussion Summary - AmberGlen Community Plan
Technical Advisory Committee - September 10, 2009

Participants
TAC Members:
Brian Harper (Metro)
Carrie Pak (CWS)
Steve L Kelley (Wash. County)
Gregg Leon (Wash. County)
Stu Davis (Tualatin Valley Water)
Kevin Smith (Hillsboro Parks)
Ricky Icenogle (Hillsboro Building)
Marah Danielson (ODOT)
Jennifer Garland (Beaverton School District)
Jessica Tump (TriMet)

City of Hillsboro Planning Staff:
Colin Cooper
Paige Goganian
Don Odermott
Mark Sullivan
Doug Miller
Molly Marriott
Sabrina Henkhaus
Mimi Doukas (CardnoWRG)
Michael Cerbone (CardnoWRG)
Scott Harmon (David Evans & Assoc)
Jerry Johnson (Johnson Reid)

Notes from Discussion:

• Welcome & Introductions by Colin Cooper

• Objective of today’s meeting: review Concept Plan map changes, discuss Draft Community Plan document, discuss urban renewal analysis by Johnson-Reid, and review transportation model outputs. (Cooper)

URBAN RENEWAL:

• The Urban Renewal Analysis completed by Johnson-Reid finds that we do have a viable potential for urban renewal as a public financing tool for the AmberGlen area. Conservative estimates figure anywhere from 77 to 200 million. The next step would be an Urban Renewal Feasibility Study which would occur after the Community Plan is adopted. (Cooper)

• Q: I didn’t know that you could use urban renewal funds to fund transit? (Leion)
  A: You can use the money to fund infrastructure and construction costs, not for labor costs. One of the main reasons why Tri-Met has been so supportive of these efforts is because of the City’s willingness to look into public financing to be able to bring money to the table to help fund potential HCT projects. (Cooper)

• Q: I know little about urban renewal. TVWD and the school district had concerns when the idea was brought up for the North Bethany area, are there any potential conflicts/ramifications? (Garland)
  A: Urban renewal is a carefully discussed policy decision. State law has a mechanism by which funds that are taken away from a school district by urban renewal are replaced. This is a preliminary look and we would need a feasibility study and additional conversations with TVWD, Beaverton School District and internally to consider all the implications as we move to the next phase, most likely next year. (Cooper)

* This summary includes only a portion of the conversation from the meeting. The comments and responses outlined above provide a summary of the discussion and are not verbatim.
Q: Do you have to make a finding that this area is blighted before it can be in an urban renewal district? (Leion)
A: Yes. Determining blight is an odd thing – we just did this in the case of the new urban renewal in the Pearl District. It’s a relatively easy argument to make – one of the arguments to make is based on vacant farmland [Clackamas Town Center example]. (Johnson)
A: Un-developed land in the area that could be presumed that it should have developed by now could also be used to make the argument for blight [land-value ratio]. Equastone buildings have gone back to receivership and are currently being sold for a “dime on a dollar” – this could also be used to make the argument. (Cooper)

Q: Is the city still pursuing an urban renewal district Downtown, and if so, have any potential conflicts been explored? (Harper)
A: The City is continuing to pursue urban renewal for Downtown – the feasibility study has been completed but has not been adopted yet. We are working with Economic Development to look at both the valuation and area of the two districts to insure that both districts will fit in our statutory limitations for urban renewal. (Cooper)

TRANSPORTATION:

The main issue we need to look at is satisfying the Transportation Planning Rule – does AmberGlen impact the regional system, and if so, what are the solutions to mitigate and fund the issues? We have been working with road agencies to make the assumptions for our modeling – it assumes South Hillsboro, Evergreen & Helvetia are all built out for our No-build scenario, adding AmberGlen for our Build scenario. We have a lot of work still to accomplish, but preliminary numbers indicate that adding 10,000 people to the district will add a little over 1,000 trips in the peak hour (smaller effect than an extra Wal-Mart) – it is a minimal change in terms of trip generation. It indicates that less people have to drive from out of the district to their job in Evergreen, and instead, more people are driving from AmberGlen to their job in the Evergreen area. Also total vehicle miles traveled (VMT) dropped approximately 7000 during the PM peak hour in the region. Message: putting jobs closer to housing makes sense. (Odermott)

A preliminary review of the operation levels of different roadway scenarios is underway, but there is a lot more work that will need to be completed. The real focus is to look at what can be done with transit to get more mode-split and get people out of their cars. We are just getting back the T-4 transit scenarios so we haven’t had a chance to look any more into this at this time. Currently we are using a T-0 transit scenario, so if T-4 shows promising results we hope to ratchet it down to find a “sweet spot” for a transit scenario that will reduce vehicle trips and be at an affordable cost. (Harmon)

Looking at the figures comparing the existing to the proposed, we can see that the number of housing units is increased by approximately 4,500 and the number of employees is reduced by approximately 2,600. In studying the 32 intersections that are in the greater AmberGlen area, approximately half of them fail under both the No-build and Build scenarios. Total vehicle trips increases by 19% - of that, 40% is internal. This indicates that the mixed-use, transit oriented design is effective in keeping a lot of the trips inside AmberGlen. (Harmon)

Trip distribution indicates there is a more balanced effect on surrounding roads. About 20% is internal, 4.5% of the trips are coming from Portland to the district on US-26, and about 2% going west on US-26. Number of trips coming into AmberGlen is going up while the number leaving goes down. (Harmon)

Wilkins: with or without? Increase of traffic on Baseline, Walker & Cornelius Pass is evident if Wilkins is removed, but traffic on Wilkins is reduced if it is extended. (Harmon)

Adding the 206th overpass over US-26 takes trips away from Cornelius Pass, 185th, Bethany Interchanges, and 173th overpass – it would be a big regional benefit. (Harmon)

There is a lot more work to be done. ODOT approached us to take this work and turn it into an Interchange Area Management Plan to get certainty for a solution. We would more than likely form a transportation sub-committee to continue to help guide this future work. (Odermott)

Q: Are we going to discuss these Transportation Goals, Policies & Actions? Have we seen these before? Also, how was the area defined (zones)? The numbers seemed really big. (Danielson)
A: It’s in the Economic Development section of the Plan – it could also be in the transportation section. (Cooper)

Q: What about a Parking Management Study? Metro requires a paid parking strategy for a regional center so it seems like it should be part of this plan. (Danielson)
A: Yes. (Harmon)
A: We will take your input on the Goals, Policies & Actions later in the meeting (Cooper).
CONCEPT PLAN CHANGES:

- Fairly minor but important changes have been made to the map based on feedback received from the joint Planning Commission/City Council work session. Generally we received positive feedback from the group, but the resounding feedback we heard was concerning the substantial and significant park. We extended the park south (over an existing structure) to connect to the east-west park blocks. This is a long-range document and it needs to be identified as an opportunity for the future – somehow the park concept will need to be connected north to south, whether the building is incorporated, etc. Additional changes included changing 2 blocks at the southern end of the park to medium density, and strengthening the connection to Streets of Tanasbourne by adding a small strip of retail adjacent to it. We also identified a need for bridge-type connection (“Festival Bridge”) across Cornell wide enough to hold small events and provide significant linkage to the Streets of Tanasbourne. We also down-scaled the connection across the park to a “festival street” – it would provide connectivity but allow for more pedestrian uses. (Doukas)

- Q: Our property by the Willow Creek station is identified as blue and purple. We see it more as the peach color (medium density urban). Also, we would recommended extending high-density urban down the edge of the park. Also, we had a question about the 3.0 FAR on the highest density area – Fred has suggested a 6.0 FAR. (Tump)
  A: We would have to plug those suggestions into the model so I don’t know how much flexibility we have. We don’t disagree with that from a vision standpoint, but at this point in the game we have started the transportation modeling based on specific numbers. Increasing the number of dwelling units does fall into the direction of our guiding principles. (Cerbone)

- The 3.0 is the target, not the ceiling. We see it as an average – some buildings will be higher, closer to the 6.0 FAR, and some will have a lower FAR. We wanted the plan to allow for that flexibility. (Cerbone)

- Q: I have noticed other changes to the map – there are planted median additions to Walker, 185th and Cornell. If it’s a County arterial, we would not like to see a plan adopted with a planted median on it. Those design features on an adopted map become an expectation for the community. (Kelley)
  A: We want to make sure it’s flexible and works for everybody’s needs. At the transportation sub-committee level I’d like to identify where we would like to see green street infrastructure, etc. (Cooper)

DRAFT COMMUNITY PLAN:

- It is a work in progress. The key pieces are the chapters and the goals & policies which are supported by specific actions. Goals & Policies are meant to realize the original vision and guiding principles. In regard to market flexibility and economic vitality, a key piece was to plan for existing businesses to remain – I hope that this is reflected throughout the document. We have been working on our illustrations to evoke the importance of the green infrastructure. Illustrations by our Urban Design intern of Phases 1-3 show the economic strategy in play (catalyst projects, park development, full build-out, etc). The green framework elements are listed and will be reflected in an updated version of the plan. We are doing our best to stick to the tight schedule and produce a quality product. (Goganian)

- Based on feedback from the elected officials, the first opening chapter is Parks & Open Space – it’s the defining element of the entire plan. (Doukas)

- Please change the label on the map on page 5 to “Beaverton School District”, not “Board” (Danielson)

- Q: I am a little concerned about the schedule – I understand the need to make progress, but we are still missing quite a bit of document. This document is being adopted in October? It is difficult to comment on things we haven’t seen and October is not that far away. (Pak)
  A: The schedule is to have a public hearing October 14th. We will need to meet with you to go over the missing Infrastructure section which will have the goals, policies and actions that relate to Clean Water Services (i.e. low-impact development, sustainable showcase, etc). (Cooper)

- On page 17 there is some general rewording that we would like to propose. There is an inherent conflict with protection of natural resources and maximization of recreation, etc. How you say it will be interpreted later so I’d like to get together with you to provide suggested language. (Pak)

- We will be taking comments today, but any additional comments will need to be received by Paige by a week from Monday – September 21st. (Goganian/Cerbone)
  o Q: Will you have the Transportation and Infrastructure sections by then? (Tump)
  o A: We will have the full narrative shortly – we are waiting for the transportation modeling but we will be sending out the infrastructure section out early next week. (Cooper.)

- From a Parks & Recreation standpoint, we will have some tweaking and language suggestions that we will want to add so don’t take my silence today as a complete buy-off. In general it is looking good, but we will want to add some changes. We would also like to see Carrie’s review comments as well. (Smith)
• Some of the wording regarding using the riparian corridor for storm water treatment is raising some yellow flags. Current regulation says that the water quality facilities/storm water treatment needs to occur prior to the vegetative corridor. The wording in the plan can be misunderstood to indicate using the corridors as storm water treatment areas. We need to be clear what we mean and adhere to current regulations. (Pak)

• Regarding land use, we need to clarify the density numbers: maximum vs. target. The opportunity to go higher in the transit areas is encouraged. (Cooper)

• On page 31 the numbers on the Total Development Summary table don’t add up. (Tump)

• The Total Development table is hard to understand – some of it is in square feet? It is unclear if the number of residential is the number of people, units? It is helpful to use the same table in residential that you use in transportation, etc – be consistent. (Danielson)

• Q: Does Policy 1.2 in Land Use imply a range of affordability also or is that implied somewhere else? You may want to be more explicit about that. (Danielson)
  A: No we don’t – it is implied, but it needs to be stated more explicitly in the policies. (Cooper)

• Q: There are a number of green lines that connect to arterials – some look like they connect to the parks across the arterials. Mid-block arterial crossings are a challenge – it needs to be addressed in the plan. (Leion)
  A: Mid-block crossings are addressed in Policy 1.1 in the Transportation section. (Cerbone)
  A: It needs to be clarified in the policy language because it is a problem if it is implied that there will be mid-block pedestrian crossings across arterials. (Doukas)

• Add “but avoiding” mid-block pedestrian crossings on arterials to Policy 1.1 in Transportation. We would like to maintain the 600 foot spacing standard on arterials. The pedestrian system needs to be figured to allow for signalized crossings [TV Hwy accidents example] – pedestrian crossings are not safe or ideal; idea to avoid them and add them only when everything else failed to avoid them in the first place. (Kelley)
  o We are mostly talking about crossings within the local pedestrian interface, not across the arterial corridors. We need to clarify that in the language. (Doukas)

• Wink Brooks gave me his comments over the phone – he emphasized the connections to pocket parks as a secondary pedestrian system to provide light, space & solar access. A better place to discuss these may be in the Parks & Open Space. (Goganian)

• It would make sense to include what types of treatments you might be using and where you might need mid-block crossings, etc. (Danielson)

• We will provide comments back regarding Transportation Policy 1.6 [physical separation of pedestrian path]. (Kelley)

• Parking strategy is a component of demand management – you may want to add something here. (Leion)
  o Jessica Tump agrees.

• We need to insure that the concept of providing adequate level of service standard (for vehicles) is not lost in all of the multi-modal policies. (Kelley)
  o Word this around timely phasing of mobility in mitigation of any impacts that are identified. (Odermott)
  o Policy 1.7 gets at this. (Cooper)

• The “goals” should address why we are doing it – it should be a broader statement of what we are striving for. (Danielson)

• We have completed our Low-Impact Development handbook which includes detailed descriptions of how we see green street development occurring – you may chose to use this for your purposes. (Pak)

• Policy 2.4 needs to be clarified – we need to insure that reuse of demolished roadway materials is done with appropriate environmental regulations – we don’t want petroleum leaking into the ground, etc. (Pak)

• Q: I have been expecting to see a functional class map for the area and I haven’t seen it yet. This goes back to a previous comment made about possibly reclassifying portions of Walker as a collector street. Usually concept maps include this. (Kelley)
  A: We will have a functional classification map, and we may take it one step further and include which jurisdiction has responsibility over each facility. When we get done with the transportation analysis we can implement that piece. (Cerbone)
• The Infrastructure section will be sent out to everyone as soon as possible – we are just completing internal review right now. (Cerbone)

• [No comments on Economic Development section]

• Next Steps: We will be addressing all of the comments received today and any additional comments sent to Paige by end of the day on Sept 21st. We will arrange meetings with a transportation sub-committee immediately and we will set up a meeting with Clean Water Services to discuss infrastructure, etc.
  o There is a large amount of work to be done in regards to Transportation – 2 weeks will be too tight of a deadline for us. We want to do it right. (Odermott)

• Thanks to all for your hard work – this project is very important to the city. We will be in contact. (Cooper)
Discussion Summary - AmberGlen Community Plan
Steering Committee - September 10, 2009

Participants:
Deborah Huff (The Standard)
Charles Fleisher (Hillsboro Planning Commission)
Katie Brewer (Hillsboro Planning Commission)

SC Members:
Brad Farmer (Parr Lumber)
Jessica Tump (TriMet)
Wing-Kit Chung (Portland Community College)
Marvin Lamascus (Walker Rd resident)
Matthew Klutznick (Streets of Tanasbourne)
Evan Gionet (Milestone Management)
Laura Gentry (KG Investment Management)
Brian Newman (OHSU)
Neshia Cameron (Landowner)
Steve Abel (Stoel Rives/Principal Financial)

Notes from Discussion:
- Welcome & Introductions by Colin Cooper
- Objective of today’s meeting: review Concept Plan map changes, discuss Draft Community Plan document, discuss urban renewal analysis by Johnson-Reid, and review transportation model outputs. (Cooper)

URBAN RENEWAL:
- This is neither a feasibility study nor an urban renewal plan & report – this memo is preliminary feasibility work that aims to look at the income generating characteristics if one was established in the AmberGlen area. We looked at a conservative 3% base growth and modest growth rates beyond that (1.5% & 3%). A potential bonding capacity of 75 to 211 million over the next 20-30 years in the districts would occur. It would be a great funding source for the infrastructure pieces in the plan. It is without impact for the property owners – on the margin it’s quite a good deal. (Johnson)
- The city has completed an Urban Renewal Feasibility study for Downtown Hillsboro so we have been working with our Economic Development staff to insure that the two districts would work under the statutory limits (less than 15% of the city area and less than 15% of the assessed value of the city). (Cooper)

* This summary includes only a portion of the conversation from the meeting. The comments and responses outlined above provide a summary of the discussion and are not verbatim.
• Q: Is the application of TIF financing discretionary or 100% - is it all or nothing? Can a portion of those funds be used for debt-financing and a portion be returned to the municipal services? (Fleisher)
A: It is so rare that a district returns money – my suspicion is that you probably could. You could structure it in a way that you could accumulate and find a way to return it. (Johnson)
A: There is a need to achieve a balance – achieve the vision of AmberGlen and work on the Downtown renewal as well. (Cooper)

This is intended to be report out – if there are any questions email me or Paige. This does demonstrate a good upside to help this district support itself and bring the transportation and amenity infrastructure that we need. There is a gap in market based pricing for achievable rents vs. construction cost so to the extent that we can provide gap financing in the short term provides flexibility for this project. (Cooper)

TRANSPORTATION:
• Transportation is a work in progress. We have been actively working with Metro and their transportation modelers. The main issue we need to look at is satisfying the Transportation Planning Rule – does AmberGlen impact the regional system, and if so, what are the solutions to mitigate and fund the issues? We have strived to be comprehensive in our approach – the model assumes South Hillsboro, Evergreen & Helvetia are all built out. For our No-build scenario, adding AmberGlen for our Build scenario. We have a lot of work still to accomplish, but preliminary numbers indicate that adding 10,000 people to the district will add a little over 1,000 trips in the peak hour (smaller effect than an extra Wal-Mart) – it a minimal change in terms of trip generation. It indicates that less people have to drive from out of the district to their job in Evergreen, and instead, more people are driving from AmberGlen to their job in the Evergreen area. Also total vehicle miles traveled (VMT) dropped approximately 7000 during the PM peak hour in the region. Message: putting jobs closer to housing makes sense. (Odermott)

• There is still a lot of work that needs to be accomplished: testing “transit on steroids” scenario, refinement of the intersections analysis, what mitigation improvements are there and what is the change in the number of improvements that are needed? (Odermott)

• A preliminary review of the operation levels of different roadway scenarios is underway, but there is a lot more work that will need to be completed. In studying the 32 intersections that are in the greater AmberGlen area, approximately half of them fail under both the No-build and Build scenarios. The real focus is to look at what can be done with transit to get more mode-split and get people out of their cars. We are just getting back the T-4 transit scenarios so we haven’t had a chance to look anymore into this at this time. Currently we are using a T-0 transit scenario, so if T-4 shows promising results we hope to ratchet it down to find a “sweet spot” for a transit scenario that will reduce vehicle trips and be at an affordable cost. Once we get through that process we will have a preferred transit scenario and a preferred roadway scenario – we will combine those together into the model that we will use to get TPR compliance and then figure-out what our mitigation needs will be. (Harmon)

• Land use changes in the AmberGlen zone: Looking at the figures comparing the existing to the proposed, we can see that the number of housing units is increased by approximately 4,500 and the number of employees is reduced by approximately 2,600.
Q: Is that a decrease in projections or actual employees? (Newman)
A: Projections. The land use change has fewer employees. We went through master plans in the area, including OHSU, so the no-build scenario considers all of those at reasonable build conditions under the current zoning. (Odermott)

Q: What is the geography of the Tanasbourne/AmberGlen area? (Brewer)
A: It’s roughly what is shown in the gray area on the map. It’s roughly bounded by Rock Creek, US-26, and Beaverton/Hillsboro city limit line. (Odermott)

Q: Does the employee decrease take into account the new employment areas: Kaiser, Standard, the hotels, etc? (Brewer)
A: Yes. Within our current zoning what could be accomplished without major Comprehensive plan changes. (Odermott)
A: These numbers reflect a shift from the original assumptions under the TAZs – Amberglen is now going to be a dense mixed-use zone, not just solely office park. (Cooper)

• Q: Are all housing and employees created equal in transportation planning? (Fleisher)
A: No. Different traffic counts are applied to different housing types and employment types. (Cooper)
• Total vehicle trips increases by 19% - of that, 40% is internal. This indicates that the mixed-use, transit oriented design is effective in keeping a lot of the trips inside AmberGlen. Trip distribution indicates there is a more balanced effect on surrounding roads. About 20% is internal, 17% on Walker, 185th has fair amount of trips, and 4.5% of the trips are coming from Portland to the district on US-26, and about 2% going west on US-26. Number of trips coming into AmberGlen is going up while the number leaving goes down. (Hamon)

• Wilkins: with or without? Increase of traffic on Baseline, Walker & Cornelius Pass is evident if Wilkins is removed, but traffic on Wilkins is reduced if it is extended. (Harmon)

• Adding the 206th overpass over US-26 takes trips away from Cornelius Pass, 185th, Bethany Interchanges, and 173th overpass – it would be a big regional benefit. (Harmon)

• Q: What percentage of the trip generation would the model drop because of walk to work within the district? (Fleisher)
A: We haven't done the comparative on that yet. Part of our post-processing efforts will be to look closer at the internal trips – how many are vehicle or motorized trips? (Harmon)

• Q: What is the red line extension possibility? Is that a MAX extension? (Chung)
A: Yes. Metro has been looking at where high capacity transit should go in the future and what came out of that study was the thought of bringing an extension off of Quatama station through the AmberGlen district if the density is there to support it. (Odermott)

• These preliminary findings are indicating that the mixed-use and job/housing balance is working. We are getting towards the end of completing this crucial transportation work. We will forward you the results of the final transportation piece. We will also be forming a transportation sub-committee and we would welcome any of you to join that if interested. (Cooper)

CONCEPT PLAN CHANGES:
• Fairly minor but important changes have been made to the map based on feedback received from the joint Planning Commission/City Council work session. Generally we received positive feedback from the group, but the resounding feedback we heard was concerning the substantial and significant park. We extended the park south (over an existing structure) to connect to the east-west park blocks. This is a long-range document and it needs to be identified as an opportunity for the future – somehow the park concept will need to be connected north to south, whether the building is incorporated, etc. Additional changes included changing 2 blocks at the southern end of the park to medium density, and strengthening the connection to Streets of Tanasbourne by adding a small strip of retail adjacent to it. We also identified a need for bridge-type connection (“Festival Bridge”) across Cornell wide enough to hold small events and provide significant linkage to the Streets of Tanasbourne. We also down-scaled the connection across the park to a “festival street” – it would provide connectivity but allow for more pedestrian uses. (Doukas)

• Q: What is the net overall gain of the central park? (Lamascus)
A: Just less than 20 acres total for the Central Park. A longer edge creates more exposure, higher value. (Cooper)

• Q: What are the implications if you own that building that is designated as park space? Can the city buy it because you can’t sell if it’s slated to be a park? (Gentry)
A: Our intent is to keep people whole, to the extent that they are there and still want to be there. From a design perspective, there may be flexibility to keep the building and turn the parking into a green feature, etc. From a legal perspective, the comprehensive plan is visionary, the zoning would be more regulatory, but we will work on that next year. (Cooper)
A: The comprehensive plan would indicate that we envision this as a future park site, but the zoning will acknowledge that there is development on it. The parks designation tells the parks department to keep their eye on it and hop on any opportunity to acquire it for fair market value if it becomes available – it’s more of an opportunity identification. (Doukas)
  o Q: I got asked that question this morning on that specific property when someone saw this map. The building is less than 10 years – it is a class A office building made of brick and steel and it’s not going anywhere for 40 years. As an investor, is it a bad play to buy that building because its value goes out the window as soon as it gets made public knowledge that it’s slated to be a park? (Gentry)
A: It’s still a fair market situation. The Parks Dept would have to go through a normal real estate process to buy it. The city will court this piece of property in some sort of fashion, but that doesn’t necessarily mean purchasing the entire building - it may be just completing the linkages on the sides of the building to connect the open space. (Doukas)

• The investor takes an immediate hit if there is ever a change in designation – that will forever be brought up in any future transaction. Just by designating it as a possible opportunity, you have taken a hit to the value of the project. (Klutznick)
• Q: The one piece of information that I was hoping to see by this point was the zoning map. I don’t understand how to interpret the open space designation either. Looking at the vision document you get the impression that land in OHSU is converted to open space – like a base zone. This has huge impacts for us. On the map you have shown our land as class 2 natural areas but that does not mean it’s not developable. I am anxious going into an adoption process without knowing the status of that land. We will mitigate and minimize impacts areas in natural areas but we are not willing to rezone all this land as open space. (Newman)

A: What will be moving toward adoption is a comprehensive plan/ visionary document – not a zoning map. Next year we will work towards the specifics of zoning. We will continue to involve all of you in that process. (Cooper)
  o For the record, we will want further clarification on the open space designation – is it a base zone, overlay or aspiration on part of the parks dept? (Newman)
  o We will clarify that open space overlay in this document. We need to make clear that the overlay is separate from the underlying zoning. (Doukas)

• Q: What is the green strip north of Cornell on Stucki? (Klutznick)

A: As an effort to demonstrate greening streets, we have green graphics on the map. We will not be condemning your property or anything but we will be cleaning up those graphic representations so it there are not any assumptions made. (Cooper)

• Q: None of the actions in the Transportation section reflect the Wilkins extension. We would like some clarity about the action related to that is. (Newman)

A: We will add an action item to clarify that it is a separate study area. We have tried to show with our transportation model that we can live without the extension. (Cooper)

A: From a technical perspective, we are trying to evaluate if we really need it. It’s in our system plans, but if we don’t need it functionally then why spend money to build a bridge across the wetland. (Odermott)

• I have a few minor notations to the map that I will give to do CardnoWRG. (Newman)

• When we start coloring blocks there is a rigidity that is established and we end up with zoning based on those colors of the map. The text of the plan should reflect an inherent flexibility so we understand that this is visionary and we can adapt to changes that occur in the district. I don’t see that flexibility as clearly as I would have hoped. (Abel)

• [Relayed to Brian Newman] We do respond very well if you come before us to articulate your concerns at the public hearings. (Brewer)

DRAFT COMMUNITY PLAN:
• It is a work in progress. The key pieces are the chapters and the goals & policies which are supported by specific actions. Goals & Policies are meant to realize the original vision and guiding principles. In regard to market flexibility and economic vitality, a key piece was to plan for existing businesses to remain – I hope that this is reflected throughout the document. As we’ve heard from Steve (Abel), we need to continue to work on this to insure that that flexibility is clearly stated in the plan. We have been working on illustrations to evoke the importance of the green infrastructure. Illustrations by our Urban Design intern. Phases 1-3 show the economic strategy in play (catalyst projects, park development, full build-out, etc). The green framework elements are listed and will be reflected in an updated version of the plan. The plans for the Parks & Open Space chapter are being updated and will coincide with the text. We are still trying to hold to our schedule and still make progress. (Goganian)

• We would like to get general feedback on the direction of the document (broader goals, policies & actions). Any word-smithing concerns can be sent to Paige. All comments need to be sent to Paige by Sept 21st (or you can call her). (Doukas)

• Q: Policy 2.5 in Parks & Open Space states a required distance to parks and open space. Shouldn’t this be a function of planning not of the private development? (Abel)

A: It could be either – if there is a large development it may be part of the design as private open space. (Cerbone)
  o Q: So is the first person to develop near the central park required to put the park in? (Abel)
  o A: That would be addressed in the zoning – the implementation piece. (Cerbone)

• Parks and Open Space is the leading chapter of the document which reflects the unique nature of this district - the central park is the defining component of this plan. (Doukas)

• This is our last formal meeting, but we are available to meet individually or with small groups prior to the public hearings. (Cooper)

• Q: Is the intent for the central park to be a City park? (Gentry)

A: Yes. It is in the Parks Dept. Master Plan to have a community park in the eastern section of the city. This park could serve this purpose and so it would be assumed that it the property would eventually become public property. (Cooper)
• **Q:** What are the green strips that are shown between our properties? (Gionet)
  **A:** They are mid-block pedestrian ways that provide space in between buildings to create pedestrian connections. Likely they would be private spaces or quasi-public spaces. The form is not specific in the policies. The zoning may call out a minimum, but we will work on that next year. (Cooper)

• **Q:** I have been making an assumption that the goals and polices are used by the City to drive the thinking that will ultimately become the zoning code. Once the zoning code has been adopted then these goals and policies are not criteria for individual developments, but instead are context? (Abel)
  **A:** Correct. (Cooper)

• Regarding community character, I’d like to see the streetscapes developed more. What are people on the ground in each of these areas going to be seeing? Some schematics or drawings to give a feel would be helpful. (Brewer)
  **Q:** If we were to put illustrations into the plan would that concern property owners or would that serve to provide a context in which this policies are done? (Brewer)
  **A:** I can’t answer for property owners, but as a planning commissioners illustrations help develop comfort and tone – we need to be careful as to not tie us in to specifics but just give a feel [Kaiser Hospital example]. (Brewer)
  **A:** The example of a street in Multnomah County demonstrates that it may prove to be a problem that needs to be overcome as things change in the future. (Abel)

• I like Policy 1.9 – it mirrors policy 1.3 & 4.1 in the Economic Development section which provides the flexibility for the existing structures. That same about of nimbleness needs to be built into the rest of the plan. (Abel)

• **Q:** On page 26, is the mixed-use meant to be vertical uses or just a mix of uses throughout the district? Are you open to both of these or is there a specific mixed use? (Chung)
  **A:** Intended to be open-ended to allow flexibility for either of the types. (Cerbone)

• **Q:** The 17% increase of traffic on Walker Rd – on the original plan we had a traffic circle to address this, have you addressed any kind of traffic calming strategies on Walker Rd? (Lamascus)
  **A:** We haven’t looked at whether we can fit a traffic circle into the system, but generally they don’t fit into a signalized system well. On Walker, west of Stucki, it becomes a City road and it is desired for it to be a slower urban road, more pedestrian friendly. Traffic circles definitely have benefits if used in the right places. (Harmon)

• **Q:** The Urban Activity Center bothers me. Has Johnson-Reid addressed the critical mass and disposition of this? It has gotten smaller and moved off of Cornell Rd. Does it still contain enough characteristics to achieve its goal? (Fleisher)
  **A:** It was reduced in size and moved off of Cornell in response to the feedback received by Johnson-Reid. This area is well served by Streets of Tanasbourne, and this retail will be more a town center type retail. Too much retail will not be successful. (Doukas)

  **Q:** Maybe there is a better term for Urban Activity Center – it sounds like downtown Philadelphia. (Fleisher)
  **A:** We are open to other terminology. It’s the central core – the most vibrant piece of this district. (Doukas)

  **Q:** One of the more interesting characteristics of the land use designations was that, initially, the flexibility was built into the standard colored zones. They were meant to be market responsive. Maybe the red zone should have a similar characteristic. (Fleisher)
  **A:** Part of the struggle with this is it’s difficult to break away from the standard zone colors. It’s not strictly retail – it will have complimentary uses that will keep it alive (civic, etc). (Doukas)

  **A:** A Good clear definition is needed for this district. (Fleisher)

• **Q:** This AmberGlen district was supposed to have a common identity, but the plan calls for each district to have its own distinct identify (seems segregating, rather than integrating). I want to insure that a common identity is present throughout this entire district. Also, it is important to address City services (police, fire, schools) in a community plan. The schools are also an important part of the identity. (Breiner)
  **A:** Services will be addressed in the chapter that is not ready yet – the Infrastructure section. (Cerbone)
  **A:** We have discussed the branding of the district and it is mentioned in the Economic Development section but we can weave it more into the entire plan. (Cooper)
  **A:** There are layers of identity – you would live in Amberglen, but you would have a more specific “neighborhood” within the district. [Disneyland example] (Doukas/Cerbone)

• **Q:** What would our identity be as neighbors to the west of AmberGlen? We are in Shadow Springs - 42 duet townhomes, and It’s important to integrate us into this district so that it blends. (Cameron)
  **A:** The long term vision is to have the medium density transitional areas on the edge to blend to the existing neighborhoods, but we can talk about that in a policy that addresses knitting AmberGlen into its surroundings. (Cooper)
• We certainly want to continue to collect your feedback and get a general consensus. If there are any strong objections please let me know either now or by phone or email. (Cooper)
  o Q: I would bless you if I knew what I was blessing. It seems to be fairly incomplete – is there a next step when we will see the whole document? (Fleisher)
    A: We are a little behind with Transportation and some of the other components. The work session for next week has been cancelled – the Council has expressed general support for the plan and they trust that the Planning Commission will vet the community plan as it moves forward. We will have this document in better shape to present at the final open house on Sept 17th. There will be a Planning Commission meeting on Oct 14th, and then tentative City Council adoption Nov 17th. We will send out this plan in its completeness in one week, but the Transportation section is 2-3 weeks away so that piece will have to slide in at the end. There are a lot of working parts, but a complete draft of the plan will be done by the end of the month. Thank you. (Cooper)
An open house for the AmberGlen Community Plan was sponsored by the City of Hillsboro Planning Department on September 17, 2009 from 5:30 to 7:30 p.m. The open house was held at the AmberGlen Conference Center located within the Plan area and was attended by approximately 12 people including local residents, employees, and other interested parties. The purpose of the Open House was to review and learn about the Draft Community Plan document and provide comments. The September 17, 2009 open house was the last of three public events scheduled to occur during the Community Plan process.

INFORMATION PROVIDED

Paige Goganian and Colin Cooper provided a brief of the project history and introduce the Draft Community Plan document. Discussed were the main components of plan:

- Parks & Open Space
- Land Use
- Economic Development (and potential catalyst projects)
- Flexibility of the Community Plan was shown with watercolor images illustrating potential phasing of the project over time.
- Transportation

QUESTIONS AND COMMENTS

Questions and comments received by participants and staff members’ responses are provided below followed by written comments received. (Q. = Question; C. = Comment; R. = Response)

Q. *How is the transition of high-rises along 206th going to be handled?*
   
   R. The Plan shows densities stepping down towards the existing residential on 206th. The watercolor illustrations don’t show that transition well. The high-rise and mid-rise buildings will be visible. The blocks within the district are relatively big so they will be divided up and have different buildings within each block. There is a unique market for high-rises, possibly within the near-future.

Q. *What is the corridor that is shown (as a possible HCT route coming down off Evergreen?)*
   
   R. Brookwood Pkwy

Q. *Last meeting you discussed that Tri-Met had not acknowledged what was going on here in AmberGlen, but from today’s meeting it sounds like they are on board (regarding the HCT route)?*
   
   R. Tri-Met has always been supportive of this plan but there was an issue that Don discussed last open house about this route being dropped to a lower tier (in Metro’s HCT study). We went back to them and demonstrated the need (increase of residential units, etc) and it is now back in the 2nd Tier. Metros adopts this map, and Tri-Met is the one that actually executes it.

Q. *How many more light rail stations are planned for the district? Will it be similar to the new WES train?*
   
   R. Two, with a third at Evergreen – but this is very speculative. There are several different options of where it might go – these will need to be studied further. This would not be heavy rail like the WES, it would be light rail.
Q. Why would it necessarily be light rail? Why wouldn’t it be buses that have more stops? A streetcar similar to the Pearl would be more appealing to people.

R. That is a great point. Several property owners have suggested a rubber-tire circulator or a streetcar to serve the district. We have a policy in the plan to pursue that in any case. Light rail does send a clear message of commitment (public investment) to the potential developer, when a rubber-tire circulator could be gone tomorrow.

C. I have noticed that the Quatama MAX station and other MAX stations have problems with graffiti, garbage, rowdy behavior, etc – it turns people off. These areas need to be more supervised especially if you are going to be attracting more people to this district. I went to classes at the Hillsboro Police Department as part of the Citizen’s Academy – I learned some great tips on how to handle/prevent certain things.

R. Crime is down on the MAX 16% from last year. We try to minimize problems through Crime Prevention through Environmental Design but at the end of the day you’re always going to have some problems. Policing for Westside MAX is being coordinated between Beaverton, Hillsboro, and Tri-Met Police. We will forward your concerns, and we know that we want to give people a safe feeling when they come to Amber Glen. Henry Reinman, a police lieutenant, serves on the Technical Advisory Committee and he has been looking at the project from a safety standpoint.

C. Is the Park meant to be used from people outside the community?

R. Its real intention is for use by people within the district, but it will be attractive enough to draw people from outside the area. Even today the park attracts people from outside the district. In order to make this park valuable for the residents, it will need to be more passive. If it is active it will be less desirable to live directly next to it (noise, etc).

Q. What ties Summerset West to the district/light rail? (It’s a neighborhood across 185th on the other side of US-26.) There are a lot of houses up there.

R. There has been discussion of overpass over 206th, but hopefully there is better bus service along 185th.

C. Going back to an earlier comment, I just wanted to point out from experience that the Police are very responsive when called – they don’t discount your concerns. I think they do a very good job.

Q. Will this district be a part of Hillsboro?

R. Yes, with the exception that it is within the Beaverton School District. Our elected officials have expressed concern regarding this issue. There is an identity issue and confusion with the area surrounding the district – people often are unclear if they are in Beaverton or Hillsboro. We want to build a strong identity and tie the district to Hillsboro.

C. I have a Beaverton address but I’m in Aloha, but I feel like I’m part of Hillsboro (because my kids when to Hillsboro schools).

C. Schedule: PC work session on Oct 28th, first hearing Nov 12th, a second hearing (tentative) Nov 23rd, and a first reading Dec 15th (tentative). There will be a revised draft sent out prior to the public hearing. We will be sure to contact the CPO groups.

C. Be cautious and flexible about the school projections (Orenco School example).

R. We rely on the school district to complete their own planning. As far as land, school districts like to choose their own school sites, but we are working together with them.

WRITTEN COMMENTS

1.
CITY OF HILLSBORO

Discussion Summary - AmberGlen Community Plan
Planning Commission Work Session – October 28, 2009

Participants:
Planning Commissioners:
John Coulter, President
Katie Brewer
Brian Roberts
Ross Mathews
Steve Callaway
Ray Lankford

City of Hillsboro Planning Staff:
Colin Cooper
Paige Goganian
Don Odermott
Doug Miller
Molly Marriott
Scott Harmon (David Evans & Associates)
Joshan W. Rohani (David Evans & Associates)

Notes from Discussion:
• Welcome & Introductions by Colin Cooper
• The original vision of the plan remains the same: regional level, urban center with pedestrian amenities. The objective of today’s meeting is to introduce the AmberGlen Concept Plan and get your feedback as to whether it captures the vision and provides a platform for strong implementation of the vision. (Cooper)
• There is still work that remains to be done to complete the Plan, but the real focus are the Goals, Policies and Actions. These are the pieces that will get adopted in the Comprehensive Plan. (Goganian)

PARKS & OPEN SPACE
• The goal is to increase density but ensure livability and providing access to nature and recreation are key in accomplishing this. The Parks & Open Space goals articulate a need for organizing development around natural amenities and the significant central park. The illustration shows the concept: Rock Creek and Bronson Creek as the core riparian amenities, and the central park which will be reconfigured to connect to the upland forest park blocks to create continuous green connections. The first goal talks about it being a landmark identity; it is a green place with access to nature. The secondary network includes green connectors, green boulevards (Stucki, Wilkins), pocket parks and green access spaces. (Goganian)
• Q: What is at the bottom of the central park? (Mathews)
  A: It is identified as a potential park opportunity; it is not designated open space. (Goganian)
• Goal 2 discusses a need for providing a range of recreation opportunities for the people who live or work in AmberGlen and also for the broader community. The Parks Master Plan identifies a community park in this area with a health and wellness focus, so the central park would serve this. Broader community uses may include community gardens, unique water elements or an indoor recreation center. (Goganian)
• The streets and linkages will be integrated with the green network; street design will promote off-road pathways. The green parkway will provide an opportunity for potential stormwater management and habitat enhancement – they tend to

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*This summary includes only a portion of the conversation from the meeting. The comments and responses outlined above provide a summary of the discussion and are not verbatim.
be quieter and have a distinct character. They will provide connections to the East, West & South. The festival street will be at the south end of the Central Park – it could be used for mobility as a local street and special events (acts like a plaza). The regional trails, pocket parks and green access lanes create a hierarchy from street to intimate spaces. They will be green and provide access to light. To the extent that it's practical, our streets will be designed to effectively manage stormwater. This will need to be preceded by a stormwater management study and carried forward with standards for the entire area. (Goganian)

- A possible competition for the central park is being explored. It would help raise interest in the project and get state of the art ideas to make the park truly a unique, sustainable showcase. (Goganian)

- Q: Regarding the sustainability notion, form follows function and people might be inclined to do xeroscaping for example, instead of a traditional park function. Is our vision clear about this? (Lankford)
  A: It's about livability and providing an amenity. People are not going to want to live here if they don't have something very special. Part of the competition guidelines would have that as an objective. Sustainable practices would be encouraged where realistic and effective. (Goganian)
  Q: Would the scope entail only streetscapes or building design? (Lankford)
  A: What is envisioned is the green elements – they key would be the central park, but the connecting elements (trails, etc) are a big part of the green system. (Goganian)
  Q: The Parks Open Space & Goals, Goal 2, Policy 2.1 is a wet noodle statement. It does not define the central park as a unique, defining element. It needs to be advertised in our drafts as the unique entity that it is. We need to sell this – we don’t want to wash down the grand vision of the park in the language. It is the soul element that needs to be there to justify the densities. (Lankford)
  A: It does need to be very clear. We appreciate that feedback. (Goganian)
- Ed Dennis did emphasize this in the City Council/Planning Commission work session – the central park is the heart and soul of this project. (Brewer)
- Those of you who were on the Pearl District tour know that well-designed open space in a dense area can achieve a lot. [Jameson Square example] (Cooper)
- Consider stating in the goals that the park is the “soul” of the district. Quality design is what we are after and this project will be better because of the parks and the connections. We are creating passion in the project because of the green spaces and connections. (Roberts)
- We realized that we are missing a specific policy about preserving and protecting the existing trees. It's a simple policy statement and we will make sure it is addressed in the revised draft. “Protect and incorporate existing and significant trees to the extent practicable.” (Goganian)
  - There is always a way around “to the extent practicable” – there needs to be something that emphasizes the importance of preserving the trees; stronger language (Roberts)
  - We need to have a policy that translates into a regulation which would require specific requirements before cutting down a tree. We need to find a balance. (Cooper),
  - This is an endeavor on our part to create a more rustic, forest element, but it is obvious that there will be a need to cut some trees down that are not in the green ways to accommodate development. (Lankford)
  - Where the buildings go is one thing, but where the parks are is another thing. (Roberts)

LAND USE
- The land use concept is mixed use. There is a mix of uses within each of the colored designations. The yellow is not a mixed use – it is a transitional residential use. The main emphasis is residential – we are increasing residents by about 6k. (Goganian)
  - An office or retail space could go in any number of these buildings but it's not a requirement. We don’t want to dilute it. (Cooper)
  - The idea is to preserve views and solar access. Its designed to work with existing development until a time where the market allows for redevelopment, which could be quite a long time for some of the class A office buildings. (Goganian)
- The code rewrite language is in feet, not stories in terms of height. We need to make that consistent. (Brewer)
  - We need to also remember to take into account the stories for parking garages. (Roberts)
- Q: Regarding the letter from Stoel Rives, what does regulatory taking mean? (Brewer)
  - If you down zone a property you are essentially limiting the land use rights of the property owner. We will do a broad comprehensive plan designation that doesn’t take their rights away. (Cooper)
• The chapter organization of the Land Use chapter needs some reworking but the goals, policies and actions are quite good. We need to talk more about transitions, scale and materials in the Community Character and Districts section – they are important in terms of design and livability. (Goganian)

• Q: What is the history of the AmberGlen name? Is there any significance to it that would contribute to the character? (Brewer)
  A: [unclear response]

• Another key piece for livability is the active streets. Key elements include: open street fronts, transparency, stepping back after 2-3 stories to allow light, 12 foot sidewalks to allow for a healthy pedestrian zone, on street parking, curb extensions, tree plantings, etc. These elements will need to be brought forward as we develop our standards and guidelines next year. Balconies and access to green is essential. (Goganian)
  o Q: It's appealing to see the large sidewalks and pedestrian zones, but how much contiguous on-street parking could be expected? 4 lanes of asphalt aren't that desirable. (Lankford)
  o A: All components need to be designed. A plan view would be helpful to show all of the green elements. (Goganian)
  o The balconies in the Pearl District are truly functional (Brewer)

• The Stucki Boulevard design concept (not standard) helps continue the iconic treatment of Evergreen Parkway; it will tie the district into Tanasbourne. The bikes are protected by off street parking. (Goganian)

TRANSPORTATION
• In concept, it's about balancing modes [explanation of the function of the streets and LRT is indicated on the map]. Bike and pedestrians lanes are on the key streets. It is a balanced system. (Goganian)
  o Q: Do we have the easements for potential light rail? (Lankford)
  o A: We will have a strategic conversation with our partners (OHSU), but we do have plenty of right-of-way to work with. We will make TSP amendments as necessary next year to ensure we have the adequate right-of-way where we might not have it now.(Cooper)
  A: Metro has been updating the Regional Transportation Plan which allows us another opportunity to get the right-of-way. (Odermott)

• Street sections and descriptions will be completed in the next draft. The green connections may be public or private. (Goganian)
  o Q: As private, could the rug ever disappear from under us? (Lankford)
  o A: Typically private is with a public access easement but it's hard to say. There may be places where you require it and places where it is private with no public access. (Cooper)
  A: Flexibility will be given as to how, but maintaining access and light within the blocks will be a must. (Goganian)

INFRASTRUCTURE
• The previous studies indicate approximately $5 million for water and sewer and $5 million for stormwater. Although these figures may be a bit outdated, they are still significantly less than what they would be if this was not a developed area. With significant increases in densities we need to explore efficiencies that could be captured at a district level (i.e. stormwater management). We will need to do a comprehensive stormwater management study to explore this further and come up with effective solutions (work with transportation, engineering, Clean Water Services, etc). The existing pond captures runoff and is reused as irrigation in the park – we want to expand on this existing thinking. (Goganian)
  o Intent of a zero net impact? We don’t want to chase people away, but we do want to create something that is nationally recognized. (Lankford)
  o There is the public side which is the parks and open space and there is the private side which are the buildings. We should set the bar fairly high on the public side – set it at zero as a model and then see what happens on the building side. (Roberts)

ECONOMIC DEVELOPMENT
• [Colin covers the four goals of Economic Development]

• At the public hearing we would be adopting the AmberGlen Plan and the map amendments to the Comprehensive Map. As we move forward we will implement zoning that meets the districts. Principal financial owns all of that land – they are positive about this plan but it is their land. We will initiate the plan at the public hearing Nov 12th and adopt it shortly after. To follow will be the zoning, potential urban renewal, other public financing methods, capital improvement project and TSP amendments. (Cooper)
- Go back through the 2020 Vision and identify as many areas as you can where this plan meets the Vision. Keep those evident as you move forward. Any homeowner should be able to understand this plan. (Coulter)
  - AmberGlen can be part of the realization of some of the ideas that will be revisited in the Vision 2020 review coming up. Examples within AmberGlen can be used as ways that the current community's desires are being met. (Callaway)

- Q: Has anybody looked for an original/historic name that applies to this region? AmberGlen is a new name—it's not historic at all. We should look for the true historic base.
  A: We will look into. The history and green elements makes this a unique place. (Goganian/Cooper)

**TRANSPORTATION: DAVID EVANS & ASSOCIATES PRESENTATION**

- We have an obligation to maintain mobility with the current Comprehensive Plan. Regarding the AmberGlen Plan, we need to look at the extra burden that is created and figure out how to mitigate it. The objective of tonight's presentation is to hit the highlights of the 1200+ pages of data that had come out of the models. (Odermott)

- The “good news” is that TPR can be met. We have major stakeholders (Washington County and ODOT) who believe in this project but they need to plow through all the data to make sure they have covered their bases. The three areas that stand out are: Walker ramp meter function, double lefts at Evergreen and 185th, and Hwy 26 interchange at 185th. (Odermott)

- Q: Is the possibility of light rail part of this analysis? (Coulter)
  A: We will have the transit model results ready for the first hearing. The preliminary analysis indicates that the transit model increased the number of trips but not much change in travel volume. None of the road improvements dropped off the map with the “transit on steroids” scenarios. (Odermott)

- What is going to take to meet TPR? 173rd & Walker would need an additional SB right turn lane and a 2nd NB lane, Evergreen at 185th would need to relieve the left turn demand. (Harmon)

- Q: Will Bethany have any effect on this? (Coulter)
  A: Yes – this model takes a comprehensive approach by factoring in the surrounding communities; it's a more rigorous analysis. (Odermott)

- Q: Will the time element of people on the road increase? (Coulter)
  A: It's part of maintaining the 99% capacity. We are shortening trips region-wide by bringing this type of housing closer to the jobs. More people will be using alternative modes: walking, biking, transit, etc., and we are adding traffic on the off peak hours.
    - That is a huge endorsement of what we are doing here. (Lankford)
    - We need to keep quality of life for current residents and make sure that our average citizens understand how this will impact them. This type of discussion needs to be part of the public presentation. (Coulter)
    - Now people can have an urban living environment close to where they work and have the ability to ride the train downtown when they need to. (Odermott)
    - This site of AmberGlen is close to jobs not only in Hillsboro (Intel, Genentech, etc) but close to Nike, Columbia Sportswear, etc. (Cooper)
    - Congestion in the heart of an urban area is accepted, but when you get on the fringe on the suburban arterials people expect to be moving. This is the balance we are trying to attain. (Odermott)

- Q: Do the employment figures take into account the new Kaiser hospital? (Callaway)
  A: Yes. It's part of the proposed. (Odermott)

- Q: How are we losing employees? (Brewer)
  A: It's changing the current zoning. It is capacity, not existing employees. We are housing short, job rich so this is an opportunity to change that. (Odermott)
    - It should be reworded so that it doesn't sound like we are displacing current employees. (Callaway)

- There is a 19% increase in vehicle trips in the area – 40% of that is internal trips. (Harmon)

- We have the tools in the toolbox to help fund the areas where we need to meet TPR. If we get urban renewal – a new funding source, it will help fund the deficiencies that we have. It takes time to pick away at these issues, but it looks more daunting than it is. (Odermott)
• We are going to want to emphasize the internal trips growth to the public. We need to also stress what the number the trips mean (i.e. errands on the way home from work are all separate trips). (Lankford)

• Q: What are our chances of being totally surprised? (regarding trip distribution) (Lankford)
  A: One of the big surprises we have received from this study is the low percentage increase of total traffic on 26 (only 4-8%). (Harmon)

• Q: Does the 14% going south reflect South Hillsboro build out? (Callaway)
  A: Yes. (Harmon)

• What is AmberGlen required to look at for meeting TPR? It's a pretty small area. Only 2% of the volume increase at 185th interchange is from AmberGlen. (Harmon)
  o Q: What does 99% of capacity mean? (Brewer)
    A: If you are not able to get through when the lights complete a cycle, you are over capacity. (Odermott)
  o Q: Why are we not aiming for 85%? (Lankford)
    A: You would start looking like Florida with triple left turns lanes, etc. (Rohani)

• Q: What is Metro's system expansion policy? (Brewer)
  A: It's focused mainly on transit and alternative modes and corridor approach, focused on connectivity. (Odermott)

• The planned RTP roadway projects: Walker extension from Stucki to 194th, the Wilkins extension from 185th to AmberGlen, 173rd extension across US-26, Stucki extension from Walker to 206th, and 15 intersections with 50 movements (the big one being the 185th and Baseline grade separation). (Harmon)
  o Q: 173rd is not in Hillsboro? (Callaway)
    A: It is in the county's RTP. It's Beaverton's and the County's. It's not our responsibility but it does impact the greater connectivity. Concerns about 173rd have been brought up by Beaverton. (Odermott)

• [2035 deficiencies and solutions are discussed] (Harmon)
  o Roadway Mitigation
    • 185th - Third Northbound Lane (OR Triple Left Turn at WB Ramp)
    • Evergreen to Bronson
  o Intersection Mitigation
    • 13 Intersections (35 Movements)
      • 7-Lanes on Walker (185th through 173rd)
        o Or Modify Ramp Meter Rate?
      • 5-Lanes on 173rd at Cornell and Walker
      • Third Eastbound Left-Turn Lane on Evergreen at 185th
        o Or Additional US-26 Overcrossing?

• Q: What would be the impact be of those businesses around the interchange (Marriott Courtyard)? (Callaway)
  A: That is a good point. The solution needs to make sense and be buildable and it needs to be acceptable to ODOT. (Odermott)

• The County would need Stucki to be a fast moving arterial if we went with the braided off ramp – that is not desirable as far as the AmberGlen plan. (Harmon)

• 194th crossing has a lot of potential. It connects a local to a local. It allows people to cross the freeway without clogging up the critical ramps. This lines up well with the AmberGlen plan and transit connection.(Harmon/Odermott)
  o Q: 194th seems very narrow. (Brewer)
    A: It is because of on-street parking and the buildings so close to the road. (Cooper)

• In the interchange area we suggest a need for adding a NB lane across the overpass and have it be a right turn only at Bronson, and adding storage for the right turn lane only. The lefts on Evergreen also need to be addressed. We suggest extending the right turn pocket to Evergreen so there are two right turn lanes onto the ramp. (Harmon)
  o The trade off is trees on Evergreen. (Odermott)

• [TPR Compliance is discussed] (Harmon)
  185th Interchange: Westbound Ramp Terminal
  o V/C = 1.05 Under Current Comp. Plan
    • (ODOT Std. = 0.85 V/C)
  o V/C = 0.81 Under Current Comp. Plan (Mitigated)
Assumes Additional Northbound Lane
Southbound Right-Turn Lane Storage
Still need Triple Left at 185th/Evergreen
  • V/C = 0.80 Under Amended Comp. Plan
  • Demand Shift on Peak vs. Off-Peak Movements
  • If We Avoid the Triple Left Turns at 185th/Evergreen With a 194th Overcrossing
    • We Increase Traffic Southbound at 185th Interchange
    • 0.89 V/C with 194th Overcrossing

- Preliminary findings from the transit study find that there is no reduction in required mitigation – we move more people but vehicle trips remain constant. Non-motorized trips are increased. (Harmon)
  • Q: What is the purpose of increasing parking fees? I don’t want to use it to create revenue for budget shortfall. We don’t want to look greedy. (Coulter)
    A: We are creating a significant center and it’s just one of the strategies to consider. (Cooper)

- When you impact a state facility you need to complete an Interchange Area Management Plan (IAMP) – we will participate and fund the IAMP. The commitment to this is key to ODOT for certainty. (Odermott)
  • The IAMP will look at 185th at US-26, 185th at Evergreen, and Impact of US-26 ramp metering on Walk Road. (Harmon)

- We need to be cognizant of the balance between the cars and the pedestrians. (Brewer/Roberts/Cooper)

- Thank you for your time and participation. Contact Paige with any suggested changes. The first public hearing is Thursday Nov 12th. (Cooper)
  • Q: Could you hand deliver the materials to us Friday instead of mailing them? (Coulter)
    A: Yes we will. (Cooper)

- Make it simple for the public presentation. Push the human touch – make sure everyone can understand. (Planning Commission’s recommendation for public hearing)

Discussion Summary prepared by Molly Marriott, City of Hillsboro Planning
W:\LRNGE\OHSU_AmberGlenAreaPlan\Phase II\Meetings\10-28-09_PC_WorkSession\Audio & Notes
Introduction

This memorandum summarizes the transportation analysis completed to address Transportation Planning Rule (TPR) compliance associated with the Proposed Comprehensive Plan Amendment in Hillsboro (referred to as the AmberGlen Community Plan). TPR compliance requires a long-range study of proposed land use changes to determine significant effects on the planned transportation system. If effects are significant, TPR compliance requires measures be adopted to maintain system performance at levels consistent with those expected under current zoning, and that capacity improvements that are adopted must have likely funding sources identified. This analysis compares the effects of buildout in the forecast year 2035 under the Existing Comprehensive Plan against buildout under with the Proposed Comprehensive Plan Amendment.

The AmberGlen Community Plan proposes to revise Hillsboro’s existing Comprehensive Plan for a district of northeast Hillsboro from one which allows exclusively employment to one which would allow for high density mixed use (housing, employment, and retail). Figure 1 illustrates the location of the AmberGlen Community Plan.

North of the AmberGlen district is the Tanasbourne Town Center area. While largely built out under current zoning, this analysis considered an estimated change in future development patterns from that which has been previously developed in the area. These land use changes on largely existing vacant parcels, specifically an estimated trend away from exclusive employment to a mixed use trend, coupling a reduction in employment potential with an increase in higher density housing, are all allowed under the current zoning (with a PUD approval). Thus, the land use revisions within Tanasbourne that have been modeled in this analysis do not have TPR implications, but rather are simply addressed in this study to reflect local government’s best estimate of future development trends for this district.

This memorandum is accompanied by the AmberGlen Community Plan document, prepared by the City of Hillsboro and Cardno-WRG, which provides information in greater detail on anticipated future development patterns, the internal transportation system within the district, associated economic factors, and the urban design considerations associated with the proposed Community Plan. This report provides a short introduction to the
anticipated land use changes, and their resulting effects on trip generation. Within this report are a description of the study area, summaries of housing and employment assumptions reflecting buildout of the study area under both Existing Comprehensive Plan and the Proposed Comprehensive Plan Amendment, a description of the analysis methodology employed, and an overview of the traffic analysis results and recommended next steps. Technical documentation, including summaries of design volumes, intersection lane geometry, and operational analysis results for various mitigation alternatives are contained within six (6) packets summarized in the Analysis Terminology and Description of Packets section of this memorandum.

**Figure 1: AmberGlen Area**
Description of the Transportation Study Area

The AmberGlen Community redevelopment is located south of The Streets of Tanasbourne and north of the light rail tracks. The general AmberGlen development zoning change boundaries are west of 185th Avenue, north of the light rail tracks, east of 206th Avenue and south of Cornell Road. The study area for the transportation analysis extends beyond the AmberGlen boundaries, going as far west as Cornelius Pass Road, north across US-26 to Rock Creek Boulevard, east to 173rd Avenue and south to Baseline Road. The intent in establishing the project’s transportation Study Area was to evaluate key intersections which may experience traffic demand increases of 10% or more due to the Proposed Comprehensive Plan Amendment.

A total of 32 intersections were included in the AmberGlen transportation analysis. The location of study area intersections are shown in each of the previously mentioned packets. The selection of study area intersections was based upon the impact to traffic operations in the area surrounding AmberGlen, not on traffic operations within the AmberGlen community itself. Internal AmberGlen traffic operations will be evaluated in greater detail after the proposed adoption of the AmberGlen Community Plan and Proposed Comprehensive Plan Amendment, and prior to the secondary step of adopting Zoning for the area.

Figure 2 illustrates surrounding roadways which carry PM peak hour traffic in which at least 10% is comprised of traffic associated with buildout traffic generated from AmberGlen development under the Existing Comprehensive Plan. Figure 3 provides a similar illustration under the Proposed Comprehensive Plan Amendment. A comparison of Figures 2 and 3 indicates that the influence area remains consistent despite the proposed plan amendment.

Figure 2: Existing Comp. Plan Buildout

Figure 3: Amended Comp. Plan Buildout

Contained within the analysis is a comparison of 2035 traffic volumes reflecting buildout under the Existing Comprehensive Plan against buildout under the Proposed Comprehensive Plan Amendment. This comparison can be found in Packet #6, comparing Figure 2 with Figure 4. No external intersections would experience an increase in Total Entering Vehicles during the PM peak hour of more than 8%. In fact, only one intersection
(206th at Amberwood) would experience an increase in excess of 5% (7.3% estimated). Of the 32 intersections studied, 14 would experience traffic volume increases estimated between 1% and 5%.

The subsequent traffic operations analysis finds that only two intersections within the study area will require additional capacity improvements to mitigate traffic increases attributable to the Proposed Comprehensive Plan Amendment. That said, most study area intersections were found to require capacity improvements simply to accommodate buildout under the Existing Comprehensive Plan.

Traffic Demand Modeling Methodology
The source of the traffic demand estimates is the Regional Travel Demand model (VISUM software), supported by Metro, and utilized by Hillsboro and consultant staff for this analysis. The modeling analysis included a full 4-step process performed by Metro, in conjunction with oversight on land use assumptions and modeling parameters provided by Metro, Tri-Met, City of Hillsboro, County, and ODOT staffs. Mode choice, internal versus external trip patterns, directional (enter/exit) splits, and trip origins/destinations were estimated using this process. This modeling maintained the Metro model’s limited expansion in assumed transit service within the study area. As such, it could be construed by critics as a “vehicular-mode focused” analysis. This approach was used intentionally.

In order to remain conservative, the analysis has principally focused on travel demand estimated without a significantly increased investment in transit. Had the analysis assumed a rigorous investment in transit while evaluating the TPR implications of the Proposed Comp. Plan Amendment, it would have created uncertainty as to the availability of capital funding to implement new transit system enhancements (Light Rail and buses), and uncertainty as to the revenue necessary to maintain ongoing transit operations and maintenance costs.

A “Transit on Steroids” 4-step model run was conducted which evaluated an extensive array of enhanced transit investments in the Hillsboro area to determine whether identified roadway and intersection improvements could be avoided through investment in transit. This scenario included an extension of Light Rail into the AmberGlen/Tanasbourne area, an express bus on US-26, and frequent bus service on area arterial roadways. The conclusion was reached that enhanced transit service would increase overall mobility and reduce Vehicle Miles Traveled and System Delay, but it would not eliminate the need for intersection improvements necessary to meet City, County, and ODOT current operational performance standards.

Analysis Terminology and Description of Packets
This analysis, as discussed above, compares traffic operations under both buildout under the Existing Comprehensive Plan and buildout under the Proposed Comprehensive Plan Amendment. These two land use scenarios affect the number of vehicle trips required to be served in the study area by the transportation system.
Two fundamental roadway networks were evaluated for their ability to accommodate traffic estimated with buildout under the Existing Comprehensive Plan. These two networks were referred to as:

- R1: Planned Roadway Network (TSP and in-process TSP spot amendment improvements)
- R2: Base Roadway Network (Planned Roadway Network plus additional capacity improvements, referred to as the “Base Mitigation”)

While Base Mitigation improvements were identified to meet projected capacity deficiencies, significant congestion was still identified on 185th Avenue from the Evergreen intersection north to Bronson. It was determined that simply widening the corridor was not an optimal solution, given the existing width of 185th Avenue. For this reason, a number of Alternative Road Network Scenarios were developed which evaluate a range of transportation system improvements intended to reduce traffic demand on this constrained corridor. These Alternative Road Network Scenarios were studied in conjunction with the increased traffic demand which would result from the Proposed Comprehensive Plan Amendment.

To estimate the sole effect of the Proposed Comprehensive Plan Amendment on the transportation system, traffic demand resulting from the revised land uses was evaluated on the R-2 Base Roadway Network. This portion of the analysis, documented in Packet #1 (Figure 2 versus Figure 3), identifies that the increase in traffic resulting from the Proposed Comprehensive Plan Amendment only triggers added improvements at two intersections to mitigate congestion back to the levels projected under buildout of the Existing Comprehensive Plan. These are discussed in greater detail later in this Memo.

**Notwithstanding this finding,** City staff is cognizant of the community’s expectation that transportation mobility solutions will be identified with or without the Proposed Comp. Plan Amendment. The Alternative Road Network Scenarios seek to identify an array of alternatives which could be further pursued in a subsequent Interchange Area Management Plan (IAMP), which would be undertaken subsequent to adoption of the Proposed Comp. Plan Amendment.

The Regional Model was utilized to evaluate the redistribution of traffic patterns with implementation of the Alternate Road Network Scenarios. These Alternative Road Network Scenarios included the following:

- R-1: Planned Roadway Network
- R-2: Base Roadway Network
- R-3: R-2 less Wilkins Road extension
- R-4: R-2 plus 206th Avenue crossing of US-26
- R-5: R-2 less 173rd Crossing of US-26
- R-6: R-2 plus Braided Interchange – Stucki
- R-7: R-2 plus 5-Lane Stucki
- R-8: R-2 plus Split Diamond (185th & Stucki)
- R-9: R-2 plus 5-Lane 173rd Near US-26
- R-10: R-2 plus 194th Crossing of US-26

The technical analysis is documented in six packets of 11x17 exhibits, and a composite electronic file containing all Synchro files developed in the analysis. The six packets which accompany this Memorandum are as follows:
Packet 1: 2035 Lane Configurations and Intersection Performance – Base Mitigation
Packet 2: 2035 Lane Configurations and Intersection Performance – Scenario-Specific Mitigation
Packet 3: 2035 PM Peak Hour Intersection Operations – Planned Roadway Network
Packet 4: 2035 PM Peak Hour Intersection Operations – Base Mitigation
Packet 5: 2035 PM Peak Hour Intersection Operations – Scenario Specific Mitigation
Packet 6: 2007 and 2035 PM Peak Hour Turning Movement Volumes – All Scenarios

The cover page of each packet provides a summary of the included information contained within each packet, and cross-references to related packets where more detailed results can be found. Within each packet, individual Figures illustrate the AmberGlen Community Plan area and the larger transportation analysis study area.

Performance Standards
Operational thresholds used for determining traffic deficiencies and required mitigation varies by jurisdiction. Washington County, City of Beaverton and City of Hillsboro have an intersection capacity threshold of 99 percent of capacity, which is represented by an overall intersection volume to capacity (v/c) ratio of 0.99. The Oregon Department of Transportation (ODOT) has a threshold of 85 percent of capacity, or a 0.85 v/c ratio for ODOT ramp terminal intersections. In certain cases ODOT may allow the v/c ratio to be as high as 0.90 if an IAMP is undertaken and approved and a detailed analysis is completed to show the increased v/c ratio would not pose a safety concern on ODOT’s facilities.

Traffic Analysis
The traffic analysis involved the following key steps associated with the land uses and roadway network in the study area:

- Refine regional model land use and roadway network to match City/County planning (“Model Merge”)
- Determination of AmberGlen/Tanasbourne existing and proposed Comp. Plan buildout land uses
- Determination of “Transit on Steroids” enhanced transit service assumptions
- Coordinate 4-step Regional Model runs through Metro to obtain new trip tables, mode choice estimate
- Determination of Alternative Road Network Scenarios for post-processing analysis
- Evaluate Existing Comp. Plan buildout scenario traffic operations on Planned Roadway Network (R-1)
- Determination of Base Mitigation needed to meet operational standards for Existing Comp. Plan buildout
- Evaluate Proposed Comp. Plan Amendment traffic on Base Mitigation (R-2: Base Roadway Network)
- Identify added mitigation triggered by Proposed Comp. Plan Amendment on R-2 Base Roadway Network

Refine Regional Model and Roadway Network:
City of Hillsboro staff reviewed the land use and roadway network coding in Metro’s 2005 and 2035 regional travel demand model and provided calibrations to better reflect City of Hillsboro and Washington County existing and future land use plans and Transportation System Plan (TSP) roadway network assumptions. The Transportation Analysis Zone (TAZ) land use coding was modified to better reflect planned land use patterns in key areas such as the Bethany area, West Bull Mountain, Helvetia/Evergreen area, South Hillsboro area,
Downtown Hillsboro, and the AmberGlen/Tanasbourne area. Metro’s regional land use control totals were maintained as part of this clean up process. The roadway network in and around the AmberGlen area was also calibrated to better reflect the existing and planned TSP roadway system.

The final model is referred to as the City of Hillsboro 2035 “Model Merge”. Prepared in cooperation with Washington County, ODOT, and Metro, it provides the best consolidation of all planning efforts in this portion of the Tualatin Valley, and allowed Metro to run a new 4-step model to reassess travel patterns and origin-destination trip tables. Two versions were run through Metro. The first assumed full buildout of the AmberGlen/Tanasbourne district under full buildout of the Existing Comprehensive Plan. The second version altered the land use in the AmberGlen/Tanasbourne district to reflect full buildout of the Proposed Comprehensive Plan Amendment for the AmberGlen area.

**Determine AmberGlen/Tanasbourne Existing and Proposed Comp. Plan Land Uses:**

The Tanasbourne area has been experiencing excessive traffic congestion as development has moved toward full buildout under the Existing Comprehensive Plan. This has heightened local awareness that past Transportation System Plans were based upon only about 65% of buildout conditions. This analysis has committed to evaluating transportation system needs to meet buildout conditions, both under the Existing Comprehensive Plan and under the Proposed Comprehensive Plan Amendment. Employment and housing estimates for buildout under the Existing Comp. Plan have been based upon an inventory of what is already built, coupled with a review of previously approved Master Plans for properties within the AmberGlen/Tanasbourne boundary. These totals are shown in Table 1 below.

The proposed AmberGlen Community Plan, and Proposed Comp. Plan Amendment, include changes to the Comprehensive Plan and future Zoning which would provide a better balance of jobs and housing than under the existing zoning, which is employment based with little allowance for housing. As can be observed in Table 1, the resulting mixed use zoning yields a better balance of uses within the planning area, and in total reduce employment by 4,941 jobs while boosting housing units by 6,729. The combination of these land use changes carries over to trip generation as it effects the direction of travel for generated afternoon peak hour traffic.

**Table 1: Summary of 2035 Housing and Employment**

<table>
<thead>
<tr>
<th>Land Use at Full Build Out</th>
<th>Housing Units</th>
<th>Employees</th>
<th>Housing/Employee Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AmberGlen Plan Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>2,639</td>
<td>13,588</td>
<td>16%/84%</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>7,184</td>
<td>10,968</td>
<td>40%/60%</td>
</tr>
<tr>
<td>Delta</td>
<td>+4,545</td>
<td>-2,620</td>
<td></td>
</tr>
<tr>
<td><strong>AmberGlen/Tanasbourne Area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>10,974</td>
<td>36,247</td>
<td>23%/77%</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>17,703</td>
<td>31,306</td>
<td>36%/64%</td>
</tr>
<tr>
<td>Delta</td>
<td>+6,729</td>
<td>-4,941</td>
<td></td>
</tr>
</tbody>
</table>
Trip Generation for the proposed AmberGlen zoning would also be more balanced than under the existing zoning. The proposed zoning would generate 5,487 more trips during the PM peak two-hour period than under the existing zoning. However, 40 percent (2,034 trips) of the additional trips would be internal to the AmberGlen Community and would have minimal impact on the surrounding neighborhoods and adjacent regional arterials. The remainder of the traffic growth (3,453 trips) over the PM peak two-hours would be almost entirely trips returning to housing in AmberGlen, when compared against trips generated under buildout of the Existing Comprehensive Plan. These housing based trips would generally be in an off-peak or non-critical direction in the surrounding AmberGlen/Tanasbourne area, which has a primarily employment and shopping/service based traffic pattern.

Converting the new AmberGlen PM peak two hour trips into PM peak one-hour trips, and distributing the trips using the regional travel demand model, results in PM peak hour total entering volumes at each of the 32 study area intersection increasing by less than 8 percent. The peak movement volume increase for any intersection movement due to the proposed AmberGlen Proposed Comp. Plan Amendment would be 215 vehicles westbound at the intersection of 173rd Avenue and Walker Road.

Packet #6, Figure 2 summarizes total traffic volumes on the R-2 Base Roadway Network under buildout of the Existing Comp. Plan. Packet #6, Figure 3 summarizes total traffic volumes on the R-2 Base Roadway Network under buildout of the Proposed Comp. Plan Amendment. Packet #6, Figure 4, compares the difference in Total Entering Volume between the Existing Comp. Plan buildout and the Proposed Comp. Plan Amendment buildout. Volume changes by movement are summarized, as is the percentage change attributable to the Proposed Comp. Plan Amendment.

Table 2: Summary of 2035 PM Peak Two-Hour Vehicle Trip Generations

<table>
<thead>
<tr>
<th>Trip Generation at Full Build Out during PM Peak Two-Hours</th>
<th>Internal Trips</th>
<th>Leaving AmberGlen Area</th>
<th>Entering AmberGlen Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmberGlen Plan Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Comp. Plan</td>
<td>3,599 (16%)</td>
<td>11,659 (51%)</td>
<td>7,809 (33%)</td>
<td>23,067 (100%)</td>
</tr>
<tr>
<td>Amended Comp. Plan</td>
<td>5,633 (20%)</td>
<td>11,752 (41%)</td>
<td>11,169 (39%)</td>
<td>28,554 (100%)</td>
</tr>
<tr>
<td>Delta</td>
<td>+2,304 (42%)</td>
<td>+93 (2%)</td>
<td>+3,360 (56%)</td>
<td>+5,487 (100%)</td>
</tr>
</tbody>
</table>

Determination of “Enhanced Transit” Model Assumptions:

The primary analysis addresses travel demand within the study area with limited transit service availability. Specifically, this analysis assumes transit investments consistent with those assumed in Metro’s Regional Travel Demand Model for 2035. These are very limited, and reflect only slight increases in bus frequency compared to current 2009 conditions.
Transit improvements included in the T-4 Model included the following:

- Red Line Light Rail Extension through AmberGlen to Tanasbourne
- Express Bus service on US-26 from Sunset Transit Center to Tanasbourne
- Frequent Bus Service on all Arterials (7 new routes)
- Local Circulator through AmberGlen and Tanasbourne
- Regional Center model designation (includes parking fees, urban accessibility factor)

In order to understand what might be accomplished with a more vigorous level of transit service, a separate 4-step model run was undertaken in coordination with TriMet, Metro, City of Hillsboro, and Washington County staffs. Preliminary results were available at the time of publication of this Memorandum. In general, investments in transit were found to reduce slightly overall Vehicles Hours of Delay and Vehicle Miles Traveled within the local area, adjacent cities, and the County as a whole. Increased transit mode share was also reported, increasing approximately 3% compared to the scenario with limited transit investments. Final results of this analysis will be published separately by DEA.

**Coordinate 4-step Regional Model runs through Metro:**

Metro staff has supported this analysis effort by providing multiple 4-step model runs to evaluate the “Model Merge” transportation models under buildout of Existing Comp. Plan and Proposed Comp. Plan Amendment land use scenarios. Metro staff also coded and ran the T-4 Enhanced Transit (or “Transit on Steroids”) model, providing output to City transportation planning staff. Modeling of the various Alternative Road Network Scenarios was undertaken by City staff, with post-processing of model results and evaluation of intersection performance performed by David Evans Associates.

**Determination of Alternative Road Network Scenarios:**

City staff and DEA met with ODOT and Washington County staff to develop an array of alternative infrastructure improvements to evaluate their benefits in relieving traffic congestion within the 185th Avenue interchange. These Alternative Road Network Scenarios have considered the following infrastructure investments, tested on traffic volumes resulting from the Proposed Comprehensive Plan Amendment land use scenario. This land use scenario was selected because it generated slightly higher traffic demand through the interchange than buildout under the Existing Comprehensive Plan. Following is a summary of Alternative Road Network Scenarios tested:

- R-1: Planned Roadway Network
- R-2: Base Roadway Network
- R-3: R-2 less Wilkins Road extension
- R-4: R-2 plus 206th Avenue crossing of US-26
- R-5: R-2 less 173rd Crossing of US-26
- R-6: R-2 plus Braided Interchange – Stucki
- R-7: R-2 plus 5-Lane Stucki
- R-8: R-2 plus Split Diamond (185th & Stucki)
- R-9: R-2 plus 5-Lane 173rd Near US-26
- R-10: R-2 plus 194th Crossing of US-26
Evaluate Existing Comp. Plan buildout operations on Planned Roadway Network (R-1)

Year 2035 Existing Comprehensive Plan buildout land uses, modeled by Metro using the City of Hillsboro “Model Merge” 4-step model, generated traffic demand volumes presented in Packet #6, Figure 2. For comparison purposes, Packet #6, Figure 1 summarizes existing traffic volumes, which date to 2007. Since the onset of the recession, traffic volumes have reduced slightly so road agency staff felt it conservative to utilize pre-recession traffic volumes for comparison purposes. The estimated 2035 traffic volumes were analyzed on a roadway network which included four roadway extensions and one grade-separated interchange currently contemplated in the Metro Regional Transportation Plan (RTP), local Transportation System Plan (TSP), and Amendments to the City TSP which are currently in-process. These significant system improvements are:

1. Walker Road Extension (Stucki to 194th)  
2. Stucki Avenue Extension (Walker to 205th)  
3. Wilkins Avenue Extension (John Olson to 185th Avenue)  
4. 173rd Avenue Overcrossing of US-26 (Bronson to Cornell)  
5. Grade Separation of Baseline Road and 185th Avenue

Operational volume-to-capacity results for this combination of land use and road network are presented in Packet #1, Figure 2. The study area intersections were evaluated per Highway Capacity Manual (HCM) methodology using Synchro analysis software. Multiple deficiencies were found including, but not limited to:

- Congestion on 185th Avenue from Cornell Road to Bronson Road,  
- Queuing and delay at US-26 Westbound Off-ramp left turn to 185th Avenue,  
- Queuing and delay at Evergreen Road eastbound left turn to 185th Avenue,  
- Congestion on Walker Road from 185th to 173rd Avenue, and  
- Queuing and delay at Walker Road and 173rd Avenue.

It has been identified that 12 of the 32 study intersections would fail to perform within current roadway standards (V/C = 0.99). Additionally, 7 other intersections were found to perform between 95% and 99% of capacity. These results highlighted the need to identify some additional capacity improvements to ensure all 32 intersections would meet the threshold of 99% capacity. These improvements are referred to as the Base Mitigation. They are required to meet performance standards notwithstanding the Proposed Comp. Plan Amendment.

Determination of Base Mitigation to meet operational standards for Existing Comp. Plan buildout:

The HCM analysis of Existing Comp. Plan buildout traffic operations at the study area intersections established the need for significant additional mitigation improvements above those presently identified through the City of Hillsboro TSP and planned TSP Spot Amendments. These include:

- Widening 185th Avenue to provide an additional northbound lane from Evergreen Parkway to Bronson Road;  
- Widening Walker Road to provide seven lanes of capacity from 185th Avenue through 173rd Avenue (or alternatively work with ODOT to adjust ramp meter rates);  
- Widening of 173rd Avenue at Cornell Road to 5-lanes;  
- Widening of 173rd Avenue at Walker Road to 5-lanes;
- Construct a third eastbound left-turn lane on Evergreen Parkway at 185th Avenue (or a fourth northbound through lane on 185th Avenue). Alternatively, consider one of the Alternative Road Network Scenario improvements to reduce traffic demand through the intersection; and
- Make capacity improvements at a total of 13 intersections.

The widening of Walker Road may not be needed in 2035 if the ramp meter rate at the 185th Avenue on-ramp to eastbound US-26 increases by 500 to 600 vehicles per hour (vph). The third eastbound left-turn lane on Evergreen Parkway at 185th Avenue (or fourth northbound through lane on 185th Avenue) would also not be needed if an additional crossing of US-26 is constructed somewhere between 206th Avenue and 185th Avenue to provide another option for drivers to cross US-26.

The existing double eastbound left-turn lanes on Evergreen Parkway at 185th Avenue would also benefit significantly from improved channelization on Evergreen Parkway and 185th Avenue to facilitate easier flow of traffic to the US-26 eastbound on-ramp. This would occur through the extension of the existing northbound right-turn lane at the US-26 eastbound on-ramp back to Evergreen Parkway and the re-striping of the existing northbound through lane at the westbound on-ramp to provide a shared through and right-turn lane, thereby providing two lanes of right-turn capacity on to the US-26 eastbound on-ramp. These channelization improvements would significantly improve the efficient use of the existing eastbound left-turn capacity on Evergreen Road to northbound 185th Avenue.

**Evaluate Proposed Comp. Plan Amendment traffic on Base Mitigation (R-2: Base Roadway Network)**

The second “Model Merge” 4-step model generated by Metro combined the land uses resulting from the Proposed Comprehensive Plan Amendment on the network of roadways developed to mitigate traffic congestion associated with buildout under the Existing Comp. Plan. That network, referred to as the Base Mitigation road network, has been referred to as the R-2 Base Roadway Network. The intent of this phase of the analysis is to determine whether the proposed revisions to land use resulting from the Proposed Comp. Plan Amendment would trigger any additional roadway and intersection improvements not already required to accommodate buildout under the Existing Comprehensive Plan. The resulting traffic volumes are presented in Packet #6, Figure 3.

A comparison of traffic volumes resulting from the change in land use is summarized in Packet #6, Figure 4. This comparison against buildout traffic under the Existing Comprehensive Plan indicates that no intersection within the study area would experience an increase in traffic associated with the Proposed Comp. Plan Amendment in excess of 8%. At the US-26 interchange, total entering volume is projected to increase by approximately 2%. At the intersection of 185th Avenue and Evergreen Parkway, total entering volume is projected to increase by 3.3%.

**Identify added mitigation triggered by Proposed Comp. Plan Amendment on R-2: Base Roadway Network**

The HCM analysis of traffic operations at the study area intersections found the need for a limited amount of additional mitigation to supplement the R-2 Base Roadway Network in order to meet the 99% of capacity acceptance threshold. Specifically, capacity deficiencies were identified at the following two intersections, where the following improvements were identified as needed to meet performance standards:
Walker Road at 173rd Avenue: Add a second northbound through lane
Add a southbound right turn lane

185th Avenue at Evergreen Parkway: Add either the third eastbound left turn lane or convert the existing northbound right turn lane into a through-right lane

The results of these mitigation improvements are found in Packet #2, Scenario-Specific Mitigation, in Figure 3.

Packet #3 provides the detailed HCM volume-to-capacity results for the Existing Comp. Plan buildout and Proposed Comp. Plan Amendment traffic volumes on the Planned Roadway Network (R-1). This packet also presents the effects on capacity with the Proposed Comp. Plan Amendment traffic on the Alternative Road Network Scenarios, with intersection capacity only enhanced with the Planned Roadway Network improvements.

Packet #4 provides the detailed HCM volume-to-capacity results for the Existing Comp. Plan buildout and Proposed Comp. Plan Amendment traffic volumes on the Base Mitigation (R-2 Base Roadway Network). This packet also presents the effects on capacity with the Proposed Comp. Plan Amendment traffic on the Alternative Road Network Scenarios, with intersection capacity enhanced with the Base Mitigation (R-2 Base Roadway Network) improvements.

Packet #5 provides the detailed HCM volume-to-capacity results for the Existing Comp. Plan buildout and Proposed Comp. Plan Amendment traffic volumes on the Scenario-Specific Mitigation (R-2 Base Roadway Network plus required additional improvements need to meet 99% capacity threshold). This packet also presents the effects on capacity with the Proposed Comp. Plan Amendment traffic on the Alternative Road Network Scenarios, with intersection capacity enhanced with the Scenario-Specific Mitigation improvements.

Evaluate the merits of Alternative Road Network Scenario improvements:

Throughout the analysis, and included within Packet #1 through Packet #6, are evaluations of traffic demand volumes, intersection operational performance, and recommendations on required lane improvements to meet the appropriate jurisdictional operational standards.

R-3 Scenario (Less Wilkins Extension): The evaluation of scenario R-4 (No future Wilkins Extension) was provided due to the expense of the new bridge crossing of Bronson Creek, and due to the uncertainty of its future timing in light of the implications on security at the OHSU Primate Center. It was determined that the Wilkins Extension is necessary to preclude exceeding capacity at Baseline Road and 205th Avenue, and the need to construct 7 lanes on Walker Road at 185th (even if the ramp meter flow rate could be improved).

R-4 Scenario (With 206th Crossing): This scenario tests a local overcrossing between Evergreen Parkway and Rock Creek Boulevard. It was found that this improvement would attract more than the 2% added traffic from the 185th interchange which resulted from the Proposed Comp. Plan Amendment. It was found to add a small amount of traffic through the Rock Creek neighborhood on Neakahnie Avenue. It also was found to attract more traffic away from the Cornelius Pass interchange than from the 185th Avenue interchange. This scenario appears to be worthy of further study in the IAMP process.

R-5 Scenario (Less 173rd Overcrossing): The removal of this overcrossing from the future TSP roadway network would send approximately 500 additional vehicles onto 185th Avenue in the afternoon peak hour. This would require provision of another travel in the northbound direction (a fourth through lane). It was not found to
significantly relieve the need for capacity improvements on 173rd Avenue from Cornell Road through Walker Road. This scenario is not recommended for further study.

**R-6 Scenario (Braided Interchange Stucki to US-26):** This concept would provide a direct connection from northbound Stucki onto US-26 eastbound, and a direct offramp from US-26 westbound to Stucki southbound. Modeling identified that it would attract such a significant amount of traffic from 185th Avenue and Cornelius Pass Road that it would cause Stucki Boulevard to fail without widening to 7-lanes. ODOT expressed concerns as to whether this alternative would be able to be constructed given tight spacing of ramps. This scenario is not recommended for further study in the IAMP.

**R-7 Scenario (5-lane Stucki through the plan area):** This scenario tested whether widening Stucki through the AmberGlen study area would attract sufficient traffic volumes from 185th Avenue that it could preclude the requirement for extending the 7-lane widening on 185th Avenue south to the Walker Road approach. It was found that it would not relieve any roadway improvements along 185th Avenue and is thus not recommended due to its cost and its negative implications as a barrier to a walkable AmberGlen district.

**R-8 Scenario (Split Diamond Interchange with Stucki and 185th):** This scenario appears to have merit for further study in the IAMP process. As modeled, it would attract too much traffic away from particularly Cornelius Pass Road. Further refinement testing would look at reducing its capacity to identify whether it can benefit 185th Avenue sufficiently to justify its expense. It has the added benefit of providing direct access to the AmberGlen district.

**R-9 Scenario (5-lane 173rd Avenue Overcrossing of US-26):** This scenario was found to attract too much traffic to 173rd Avenue, resulting in the need to widen 173rd Avenue from Parkview Blvd south to beyond Baseline Road. It was not found to relieve the need for other improvements identified on other roadways in the network and is thus not recommended for further study.

**R-10 Scenario (194th Overcrossing of US-26):** This scenario appears to warrant further study in the IAMP process. It would provide relief to 185th Avenue well in excess of the 2% added traffic attributable to the AmberGlen Proposed Comp. Plan Amendment. Coupled with a potential future light rail extension into Tansasbourne on 194th Avenue, it would provide an attractive multi-modal access for the Rock Creek neighborhood to the transit station without using the 185th interchange. It would also provide an alternate route for traffic travelling between the Tansasbourne and Rock Creek districts without traveling through the 185th interchange. This would improve access for shopping and commute trips.

Of the alternatives studied, the most promising Alternative Road Network Scenario identified would be the crossing of US-26 via 194th Avenue to Rock Creek Boulevard. The new crossing of US-26 would provide another option for drivers trying to cross US-26 and provide access from Evergreen Parkway to eastbound US-26 via the 194th crossing. Rock Creek Boulevard and the underutilized (in the PM peak hour) southbound 185th Avenue to eastbound US-26 loop on-ramp. The additional accessibility provided by the 194th crossing of US-26 eliminates the need for the third eastbound left turn lane on Evergreen Parkway at 185th Avenue (or a fourth northbound through lane on 185th Avenue). The 194th Avenue crossing would also provide local access across US-26 to the proposed future alignment of the Red line LRT extension, while (based on travel demand model results) not attracting regional traffic to the local roadway system. The 194th Overcrossing scenario would trigger the following mitigation needs above those identified for the Base Mitigation package of improvements.
Conclusions and Next Steps:

It has been concluded that Transportation Planning Rule requirements can be feasibly met to accommodate the Proposed Comprehensive Plan Amendment for the AmberGlen planning area. Cost estimates for the two intersections requiring mitigation above that required under buildout of the Existing Comp. Plan are underway, but preliminary indications indicate that they are feasible when compared to revenue which would be generated by Transportation Development Tax collections from the expanded development in AmberGlen. The specific improvements identified to the intersection of Walker/173rd and 185th/Evergreen should be conditioned upon the AmberGlen Plan Amendment, but it is noted that some or all of these may become unnecessary depending upon the results of the recommended Interchange Area Management Plan.

Capacity improvements at 173rd Avenue and Walker Road would be complicated by the limited right-of-way available.

It is recommended that an Interchange Area Management Plan for the 185th interchange with US-26 be completed by City of Hillsboro in conjunction with ODOT, City of Beaverton, and Washington County. The scope of the IAMP would need to consider the effect of increasing ramp dispersal rates on relieving traffic demand along Walker Road. The identified need to widen Walker Road to 7-lanes, as required regardless of the Proposed Comp. Plan Amendment, is inconsistent with regional and local objectives for that arterial. Consistent with the Regional Transportation Plan, the IAMP should evaluate the overall “Corridor” of US-26 as it relates to the role of Walker Road and the implications of ramp meter rates.

It is further recommended that the IAMP provide further evaluation of various Alternative Road Network Scenarios recommended by this study for advancement. The IAMP would also need to address morning peak hour operations, and evaluate recommended acceptable performance standards and their implications on resulting infrastructure improvements.
AmberGlen Community Plan - Traffic Analysis
2035 Lane Configurations & Intersection Performance:
Base Mitigation* (Assumed for All Scenarios)

Table of Packets:
- Packet 1: 2035 Lane Configurations & Intersection Performance: Base Mitigation
- Packet 2: 2035 Lane Configurations & Intersection Performance: Scenario-Specific Mitigation
- Packet 3: 2035 Intersection Operations: Planned Lane Configurations
- Packet 4: 2035 Intersection Operations: Base Mitigation
- Packet 5: 2035 Intersection Operations: Scenario-Specific Mitigation
- Packet 6: 2007 & 2035 PM Peak Hour Turning Movement Volumes

Planned Roadway Network: Current TSP planned improvements and in-process spot amendments on the R1: Planned Roadway Network
Base Mitigation: Planned Roadway Network PLUS newly proposed mitigation to achieve Washington County operation standard (V/C ≤ 0.99), assuming full buildout with the Existing Comprehensive Plan (as shown in Figure 2)

Package Summary:
Figures 1 and 2 assume full buildout with the Existing Comprehensive Plan.

Figure 1 provides a summary of planned TSP improvements and in-process spot amendments that have been assumed for the Existing Comprehensive Plan (referred to as R1: Planned Roadway Network). These improvements are identified in blue on Figure 1. Note that many intersections with planned improvements fail to meet the Washington County operational standard (V/C ≤ 0.99).

Figure 2 shows recommended Base Mitigation to bring the R1: Planned Roadway Network (Existing Comprehensive Plan) up to meeting the Washington County operational standard. These "Base Mitigation" improvements are foundational to support full buildout of the Existing Comprehensive Plan. This mitigated roadway network is referred to as R2: Base Roadway Network. In addition to showing Base Mitigation, this figure also provides intersection performance (v/c) Pre and Post Base Mitigation. In this case, "Pre" means intersection performance for the R1: Planned Roadway Network (Figure 1), which only includes currently planned improvements (TSP and in-process spot amendments). "Post" indicates Base Mitigation results - performance under the R2: Base Roadway Network, which includes the identified additional mitigations (thick blue dashed lines).

Figures 3-11 assume full buildout with the Proposed Comprehensive Plan Amendment. These figures show how each of the Alternative Roadway Networks (R2 through R10) would perform if we only assume Base Mitigation as identified in Figure 2. In these cases, "Pre" indicates how the scenario would perform if we only assume TSP planned improvements are in place, as shown in Figure 1. "Post" indicates how each scenario would perform if we include the identified Base Mitigation (thick blue dashed lines). Note that many intersections fail to meet County operational standards when subjected to increased traffic demand resulting from the Proposed Comprehensive Plan Amendment and the shifting travel demand resulting from Alternative Road Network Scenarios. Additional mitigation to address these deficiencies are presented in Packet #2 (Figures 3 through 11) and Packet #5 (Figures 2 through 10).
Traffic Signal

Legend

Existing Lane Configuration

Proposed Base Mitigation

STOP: Controlled Approach

Planned TSP Improvement or In-Process Spot Amendment

Grade-Separated Intersection Planned

Amended Comp. Plan

AmberGlen Community Plan - Traffic Analysis

Printed: 11/12/2009
Traffic Signal
STOP: Controlled Approach
Grade-Separated Intersection Planned

Existing Lane Configuration
Planned TSP Improvement or In-Process Spot Amendment
Proposed Base Mitigation

Pre: V/C = 0.93 No Change

Proposed Base Mitigations
Without Comprehensive Plan Amendment
With Comprehensive Plan Amendment

FIGURE 4

2035 R3: Without Wilkins Extension
With Base Mitigations

AmberGlen Community Plan - Traffic Analysis

Printed: 11/12/2009
Traffic Signal

STOP: Controlled Approach

Grade-Separated Intersection Planned

Existing Lane Configuration

Proposed TSP Improvement or In-Process Spot Amendment

Proposed Base Mitigation

Without Comprehensive Plan Amendment

With Comprehensive Plan Amendment

AmberGlen Community Plan - Traffic Analysis

FIGURE 5

2035 R4: With 206th Crossing With Base Mitigations

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**Note:** The document contains a map with various traffic signal configurations and lane configurations, along with a chart listing traffic volume changes before and after proposed projects. The map is color-coded to indicate different types of improvements, such as planned roadway extension/crossing and proposed roadway extension/crossing.

### FIGURE 7

**2035 R6: Braided Interchange - Stucki With Base Mitigation**

- **Legend:**
  - Traffic Signal
  - STOP: Controlled Approach
  - Grade-Separated Intersection Planned
  - Existing Lane Configuration
  - Planned TSP Improvement or In-Process Spot Amendment
  - Proposed Base Mitigation

- **Without Comprehensive Plan Amendment**
  - **With Comprehensive Plan Amendment**

The map includes various junctions such as Cornelius Pass @ Evergreen, Evergreen @ Cornell, 28th @ Baseline, 185th @ Wilkins, among others, with Before and After V/C values listed for each configuration.

**Printed: 11/12/2009**

**PACKET #1**
### Traffic Signal

**Existing Lane Configuration**
- Planned TSP Improvement or In-Process Spot Amendment

**Proposed Base Mitigation**
- STOP-Controlled Approach
- Grade-Separated Intersection Planned

### Without Comprehensive Plan Amendment
- Post: V/C = 0.87

### With Comprehensive Plan Amendment
- Post: V/C = 0.97

### FIGURE 11

#### 2035 R10: With 194th Crossing

- **Legend**
  - Traffic Signal
  - STOP: Controlled Approach
  - Grade-Separated Intersection Planned

- **Map Legend**
  - Planned Roadway Extension/Crossing
  - Proposed Roadway Extension/Crossing

- **Legend**
  - Without Comprehensive Plan Amendment
  - With Comprehensive Plan Amendment

- **AmberGlen Community Plan - Traffic Analysis**

- **Printed: 11/12/2009**

- **DRAFT**

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**Legend**
- Traffic Signal
- STOP: Controlled Approach
- Grade-Separated Intersection Planned

**Existing Lane Configuration**
- Planned TSP Improvement or In-Process Spot Amendment

**Proposed Base Mitigation**
- STOP-Controlled Approach
- Grade-Separated Intersection Planned

### Without Comprehensive Plan Amendment
- Post: V/C = 0.87

### With Comprehensive Plan Amendment
- Post: V/C = 0.97

### FIGURE 11

#### 2035 R10: With 194th Crossing

- **Legend**
  - Traffic Signal
  - STOP: Controlled Approach
  - Grade-Separated Intersection Planned

- **Map Legend**
  - Planned Roadway Extension/Crossing
  - Proposed Roadway Extension/Crossing

- **Legend**
  - Without Comprehensive Plan Amendment
  - With Comprehensive Plan Amendment

- **AmberGlen Community Plan - Traffic Analysis**

- **Printed: 11/12/2009**

- **DRAFT**
Without Comprehensive Plan Amendment (Figures 1&2)

With Comprehensive Plan Amendment (Figures 3-11)

Special Plan Amendment

R2: Base Roadway Network
R3: Less 173rd Crossing
R4: Braided Interchange - Stucki
R5: 5-Lane 173rd (near crossing)
R6: Split-Diamond Interchange - Stucki
R7: S-Lane 173rd (near crossing)
R8: 194th Crossing

AmberGlen Community Plan - Traffic Analysis

2035 Lane Configurations & Intersection Performance:
Scenario-Specific Mitigation* (beyond Base Mitigation)
(Additional Mitigation for Amended Use and Alternative Road Network Scenarios)

Table of Packets:
- Packet 1: 2035 Lane Configurations & Intersection Performance: Base Mitigation
- Packet 2: 2035 Lane Configurations & Intersection Performance: Scenario-Specific Mitigation
- Packet 3: 2035 Intersection Operations: Planned Lane Configurations
- Packet 4: 2035 Intersection Operations: Base Mitigation
- Packet 5: 2035 Intersection Operations: Scenario-Specific Mitigation
- Packet 6: 2007 & 2035 PM Peak Hour Turning Movement Volumes

Planned Roadway Network: Current TSP planned improvements and in-process spot amendments on the R1: Planned Roadway Network

Base Mitigation: Planned Roadway Network PLUS newly proposed mitigation to achieve Washington County operation standard (V/C ≤ 0.99), assuming full buildout with the Existing Comprehensive Plan (as shown in Figure 2)

Scenario-Specific Mitigation: Planned Roadway Network + Base Mitigation PLUS additional mitigation required under each Alternative Road Network Scenario to achieve the Washington County operational standard (V/C ≤ 0.99) when assuming full buildout with the Proposed Comp. Plan Amendment

Package Summary:
This packet steps through each of the “Amended Use Scenarios” (assuming full buildout with the Proposed Comp. Plan Amendment on each of the Alternative Road Networks) and identifies Scenario-Specific Mitigation (above the Base Mitigation shown in Packet #1) necessary to meet the Washington County operational standard (V/C ≤ 0.99). Along with the proposed mitigation/lane configurations, this summary includes intersection performance (V/C) “Pre” and “Post” mitigation. Performance by individual movements can be found in Packet #5.

Figures 1 and 2 are duplicated from Packet #1. They are included in Packet #2 to assist the reader in comparing results from the Existing Comp. Plan (full buildout) on the R-1: Planned Roadway Network (Figure 1) and on the R-2: Base Road Network (Figure 2). Refer to the cover sheet of Packet #1 for a more detailed description of Figure 1 and Figure 2.

The rest of this packet (Figures 3 – 11) identifies recommended additional mitigation (above that previously described as Base Mitigation) for each Alternative Road Network. These figures are based upon traffic demand assuming full buildout with the Proposed Comp. Plan Amendment. In Figures 3 through 11, “Pre” performance results reflect V/C conditions with Base Mitigation improvements in place (dark gray dashed arrows). “Post” performance results reflect V/C conditions with Scenario-Specific Mitigation improvements in place (dark blue solid arrows).

Note that additional mitigation improvements shown with dark blue solid arrows may result from either the increase travel demand resulting from the Proposed Comp. Plan Amendment (compare Figure 2 with Figure 3) or from redistribution of travel patterns resulting from Alternative Road Network Scenarios.

Printed: 11/12/2009
Legend

Traffic Signal
STOP-Controlled Approach
Grade-Separated Intersection Planned

Existing Lane Configuration
Planned TSP Improvement or In-Process Spot Amendment

Without Comprehensive Plan Amendment
With Comprehensive Plan Amendment

FIGURE 1

2035 R1: Planned Roadway Network
Planned Lane Configurations

AmberGlen Community Plan - Traffic Analysis

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At 185th & Evergreen: A fourth northbound through lane would also provide a V/C < 1.0 (replacing the third eastbound left-turn lane).

Legend
- Traffic Signal
- STOP: Controlled Approach
- Grade Separated Intersection Planned
- Existing Lane Configuration
- Planned TSP Improvement or In-Process Spot Amendment
- Proposed Base Mitigation
  - At 185th & Evergreen: A fourth northbound through lane would also provide a V/C < 1.0 (replacing the third eastbound left-turn lane)
- Without Comprehensive Plan Amendment
- With Comprehensive Plan Amendment
- Existing Comp. Plan Buildout

Source: R2A-64 - Figure 2

Printed: 11/12/2009
FIGURE 3

2035 R2: Base Roadway Network
With Scenario-Specific Mitigation
Amended Comp. Plan Buildout

AmberGlen Community Plan - Traffic Analysis

Printed: 11/12/2009
At 185th & Evergreen: A fourth northbound through lane would also provide a V/C = 0.99 (replacing the third eastbound left-turn lane).

FIGURE 4

2035 R3: Without Wilkins Extension
With Scenario-Specific Mitigation
**Existing Lane Configuration**

**Traffic Signal**

**STOP: Controlled Approach**

**Grade-Separated Intersection Planned**

**Proposed Roadway Extension/Crossing**

**Proposed Scenario-Specific Mitigation**

**Without Comprehensive Plan Amendment**

**With Comprehensive Plan Amendment**

**2035 R4: With 206th Crossing**

**With Scenario-Specific Mitigation**

**Amberglen Community Plan - Traffic Analysis**

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**FIGURE 5**

**Printed: 11/12/2009**

**PACKET #2**
FIGURE 7
2035 R6: Braided Interchange - Stucki
With Scenario-Specific Mitigation

AmberGlen Community Plan - Traffic Analysis

---

Planned TSP Improvement or In-Process Spot Amendment

Without Comprehensive Plan Amendment
With Comprehensive Plan Amendment
Existing Lane Configuration

Traffic Signal

STOP: Controlled Approach

Grade-Separated Intersection Planned

Proposed Scenario-Specific Mitigation

At 185th & Evergreen: A fourth northbound through lane would also provide a V/C = 0.96 (replacing the third eastbound left-turn lane)

Pre: V/C=1.11 Post: V/C= 0.97

Pre: V/C=0.96

Pre: V/C=0.99

No Change

Pre: V/C=1.03 Post: V/C= 0.95

Pre: V/C=0.96

No Change

Pre: V/C=0.80

No Change

Pre: V/C=0.98

No Change

Pre: V/C=0.92

No Change

Pre: V/C=0.81

No Change

Pre: V/C=0.77

No Change

Pre: V/C=0.95

No Change

Pre: V/C=0.93

No Change

Pre: V/C=0.92

No Change

Pre: V/C=0.94

No Change

Pre: V/C=0.74

No Change

Pre: V/C=0.68
No Change

Pre: V/C=0.99
No Change

Pre: V/C=0.72


Legend

Planned Roadway Extension/Crossing

Proposed Roadway Improvement

Amberglen Community Plan - Traffic Analysis

FIGURE 8

2035 R7: 5-Lane Stucki Throughout
With Scenario-Specific Mitigation

Without Comprehensive Plan Amendment

With Comprehensive Plan Amendment

Printed: 11/12/2009
AmberGlen Community Plan - Traffic Analysis

FIGURE 9

Legend

Traffic Signal
STOP: Controlled Approach
Grade-Separated Intersection Planned

Existing Lane Configuration
 Planned TSP Improvement or In-Process
 Spot Amendment

Proposed Scenario-Specific Mitigation

Without Comprehensive Plan Amendment
With Comprehensive Plan Amendment

Printed: 11/12/2009
Existing Lane Configuration

**Proposed Roadway Improvement**

Proposed Scenario-Specific Mitigation
- At 185th & Evergreen: A fourth northbound through lane would also provide a v/c = 0.99 (replacing the third eastbound left-turn lane)

With Comprehensive Plan Amendment

Without Comprehensive Plan Amendment

\[\text{Amberglen (Stucki) @ Walker} \quad \text{Amberglen @ Wilkins} \quad \text{Amberglen Community Plan - Traffic Analysis} \]
FIGURE 11

2035 R10: With 194th Crossing
With Scenario-Specific Mitigation

LEGEND

Existing Lane Configuration

Traffic Signal

STOP- Controlled Approach

Grade-Separated Intersection Planned

Proposed Lane Configuration

Proposed Scenario-Specific Mitigation

Without Comprehensive Plan Amendment

With Comprehensive Plan Amendment

Amberglen Community Plan - Traffic Analysis

Printed: 11/12/2009
Amberglen Community Plan - Traffic Analysis

2035 Intersection Operations:
With Planned Roadway Network* (Assumed for All Scenarios)

Table of Packets:
- Packet 1: 2035 Lane Configurations & Intersection Performance: Base Mitigation
- Packet 2: 2035 Lane Configurations & Intersection Performance: Scenario-Specific Mitigation
- Packet 3: 2035 Intersection Operations: Planned Lane Configurations
- Packet 4: 2035 Intersection Operations: Base Mitigation
- Packet 5: 2035 Intersection Operations: Scenario-Specific Mitigation
- Packet 6: 2007 & 2035 PM Peak Hour Turning Movement Volumes

* Planned Roadway Network: Current TSP planned improvements and in-process spot amendments on the R1: Planned Roadway Network

Base Mitigation: Planned Roadway Network, PLUS newly proposed mitigation to achieve Washington County operation standard (V/C ≤ 0.99), assuming full buildout with the Existing Comprehensive Plan (as shown in Figure 2)

Scenario-Specific Mitigation: Planned Roadway Network + Base Mitigation PLUS additional mitigation required under each Alternative Road Network Scenario to achieve the Washington County operational standard (V/C ≤ 0.99) when assuming full buildout with the Proposed Comp. Plan Amendment

Package Summary:
This packet provides documentation supporting operational results reported in Packet #1. Intersection performance in this packet is shown in Packet #1 as "Pre V/C" conditions with both full buildout of the Existing Comp. Plan and full buildout with the Proposed Comp. Plan Amendment, coupled with the Alternative Road Networks.

These results evaluate operational performance of estimated traffic demand on intersections with intersection improvements limited to those currently assumed in the adopted TSP and in-process TSP amendments.

Printed: 11/12/2009
<table>
<thead>
<tr>
<th>Intersection</th>
<th>LOS</th>
<th>V/C:</th>
<th>Plans without CPAM</th>
<th>Plans with CPAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stucki @ Tanasbourne</td>
<td>B</td>
<td>0.55</td>
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<tr>
<td>185th @ Broomer</td>
<td>D</td>
<td>0.96</td>
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<td></td>
</tr>
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<td>185th @ US-26 EB</td>
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<td>0.72</td>
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<tr>
<td>185th Evergreen</td>
<td>B</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Cornell</td>
<td>E</td>
<td>1.02</td>
<td></td>
<td></td>
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<tr>
<td>26th @ Walker</td>
<td>C</td>
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<td>26th @ Wilkins</td>
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<td>Evergreen @ Cornell</td>
<td>D</td>
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<td></td>
<td></td>
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<tr>
<td>17th @ Baseline</td>
<td>F</td>
<td>1.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17th @ Evergreen</td>
<td>E</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17th @ Walker</td>
<td>D</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17th @ Baseline</td>
<td>D</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th @ Rock Creek/Park View</td>
<td>D</td>
<td>0.96</td>
<td></td>
<td></td>
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</tbody>
</table>

**Legend**
- Traffic Signal
- STOP - Controlled Approach
- LOS: Level of Service
- V/C: Volume to Capacity Ratio
- Without Comprehensive Plan Amendment
- With Comprehensive Plan Amendment

**Network Operations Summary**
- LOS A: 11 Intersections
- LOS C: 13 Intersections

**Printed:** 11/12/2009
Amberglen Community Plan - Traffic Analysis

2035 Intersection Operations:
With Base Mitigation* (Assumed for All Scenarios)

Table of Packets:
- Packet 1: 2035 Lane Configurations & Intersection Performance: Base Mitigation
- Packet 2: 2035 Lane Configurations & Intersection Performance: Scenario-Specific Mitigation
- Packet 3: 2035 Intersection Operations: Planned Lane Configurations
- Packet 4: 2035 Intersection Operations: Base Mitigation
- Packet 5: 2035 Intersection Operations: Scenario-Specific Mitigation
- Packet 6: 2007 & 2035 PM Peak Hour Turning Movement Volumes

**Planned Roadway Network:** Current TSP planned improvements and in-process spot amendments on the R1: Planned Roadway Network

**Base Mitigation:** Planned Roadway Network, PLUS newly proposed mitigation to achieve Washington County operation standard (V/C ≤ 0.99), assuming full buildout with the Existing Comprehensive Plan (as shown in Figure 2)

**Scenario-Specific Mitigation:** Planned Roadway Network + Base Mitigation PLUS additional mitigation required under each Alternative Road Network Scenario to achieve the Washington County operational standard (V/C ≤ 0.99) when assuming full buildout with the Proposed Comp. Plan Amendment

**Package Summary:**
This packet provides documentation supporting operational results reported in Packet #1. Intersection performance in this packet is shown in Packet #1 and Packet #2 (Figures 2 through 11) as V/C conditions with both full buildout of the Existing Comp. Plan and full buildout with the Proposed Comp. Plan Amendment, coupled with the Alternative Road Networks.

In Packet #1, values from this packet are shown as "Post V/C" conditions, and in Packet #2 values from this packet are shown as "Pre V/C" conditions.

These results evaluate operational performance of estimated traffic demand on intersections with additional capacity improvements (Base Mitigation), supplemental to those intersection improvements currently assumed in the adopted TSP and in-process TSP spot amendments (the "Planned Roadway Network").

---

**Analyzed Scenarios:**
- R1: Planned Comprehensive Plan
- R2: Base Roadway Network
- R3: Less Wilkins Extension
- R4: 206th Crossing
- R5: Less 173rd Crossing
- R6: Braided Interchange - Stucki
- R7: 5-Lane Stucki Throughout
- R8: Split-Diamond Interchange - Stucki
- R9: 5-Lane 173rd (near crossing)
- R10: 194th Crossing

---

**2035 Base Scenarios**
Intersection Operations
PM Peak Hour

---

Last Revised: 11/12/2009
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Volume to Capacity Ratio</th>
<th>Level of Service</th>
</tr>
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<tr>
<td>Stucki @ Evergreen</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>Stucki @ Cornell</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>Amber Glen (Stucki) @ Walker</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>185th @ Bronson</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>185th @ US-26 WB</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>185th @ US-26 EB</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>173rd @ Cornelius</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>173rd @ Walker</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
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<td>170th @ Baseline</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
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<td>15th @ Evergreen</td>
<td>V/C = 0.99</td>
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<td>15th @ Wilkins</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
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<td>14th @ Evergreen</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
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<td>Evergreen @ Cornell</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
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<tr>
<td>13th @ Cornell</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>17th @ Baseline</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
<tr>
<td>15th @ Saddle Creek/Park View</td>
<td>V/C = 0.99</td>
<td>LOS = C</td>
</tr>
</tbody>
</table>
FIGURE 10

2035 R10: With 194th Crossing
With Base Mitigation

Intersection Operations - PM Peak Hour

AmberGlen Community Plan - Traffic Analysis

Legend
Traffic Signal
STOP-Controlled Approach

V/C: Volume to Capacity Ratio
LOS: Level of Service

Without Comprehensive Plan Amendment

With Comprehensive Plan Amendment

Network Operations Summary

Last Revised: 11/12/2009
Amberglen Community Plan - Traffic Analysis

2035 Intersection Operations:
With Scenario-Specific Mitigation* (Assumed for All Scenarios)

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Package Summary:
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These results evaluate operational performance of estimated traffic demand on intersections with additional capacity improvements ("Scenario-Specific Mitigation"), supplemental to those intersection improvements identified as "Base Mitigation" improvements.
<table>
<thead>
<tr>
<th>Segment Description</th>
<th>Traffic Signal</th>
<th>V/C</th>
<th>LOS</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stucki @ Stucki</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Evergreen</td>
<td>STOP - Controlled Approach</td>
<td>V/C: 0.9</td>
<td>LOS: B</td>
<td>Level of Service: D</td>
</tr>
<tr>
<td>185th @ Cornell</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Oregon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Wilkes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Baseline</td>
<td>STOP - Controlled Approach</td>
<td>V/C: 0.9</td>
<td>LOS: B</td>
<td>Level of Service: D</td>
</tr>
<tr>
<td>185th @ Evergreen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185th @ Cornell</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>185th @ Oregon</td>
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<tr>
<td>185th @ Wilkes</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>185th @ Baseline</td>
<td>STOP - Controlled Approach</td>
<td>V/C: 0.9</td>
<td>LOS: B</td>
<td>Level of Service: D</td>
</tr>
</tbody>
</table>

Traffic Signal
- STOP - Controlled Approach

Legend:
- Traffic Signal
- STOP - Controlled Approach

V/C: Volume to Capacity Ratio
LOS: Level of Service

Without Comprehensive Plan Amendment
With Comprehensive Plan Amendment

Network Operations Summary

V/C = 1.3
0 Intersections

V/C = 1.0
2 Intersections

V/C = 0.8
5 Intersections

V/C = 0.6
D Intersections

V/C = 0.5
E Intersections

Legend: Network Operations Summary

2035 R2: Base Roadway Network
With Scenario-Specific Mitigation
Intersection Operations - PM Peak Hour
Existing Comp. Plan Buildout
AmberGen Community Plan - Traffic Analysis

Last Revised: 11/12/2009
FIGURE 4
Network Operations Summary

2035 R4: With 206th Crossing
With Scenario-Specific Mitigation
Intersection Operations
PM Peak Hour
AmberGlen Community Plan - Traffic Analysis

Last Revised: 11/12/2009
FIGURE 6
Network Operations Summary

2035 R6: With Braided Ramps - Stucki

Traffic Signal
STOP-Controlled Approach

Level of Service

V/C: Volume to Capacity Ratio

LOS: Level of Service

Without Comprehensive Plan Amendment

With Comprehensive Plan Amendment

Ambler Glen Community Plan - Traffic Analysis

Last Revised: 11/12/2009
AmberGlen Community Plan - Traffic Analysis

2007 & 2035 PM Peak Hour Turning Movement Volumes

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- Packet 5: 2035 Intersection Operations: Scenario-Specific Mitigation
- Packet 6: 2007 & 2035 PM Peak Hour Turning Movement Volumes
Difference in PM Peak Hour Volume (R2 "build" minus Base Case)

FIGURE 4

2035 R2: Base Roadway Network
Turning Movement Traffic Volumes
"Amended" minus "Existing" Comp. Plan
PM Peak Hour

Amberglen Community Plan - Traffic Analysis
AmberGlen Community Plan - Traffic Analysis

Printed: 11/12/2009
During the course of AmberGlen Community Plan discussions with process advisory groups, the role of commercial retail development as a key ingredient to the success of the plan has been discussed. Questions remain, however, as stakeholder comments have pointed to some concern about the quantity and types of retail commercial appropriate for the AmberGlen plan. Specifically, concern has been expressed along the following lines:

- Too much commercial space would be unsupported by the AmberGlen plan and risk the entire community; and
- Retail categories that are redundant to nearby, existing commercial types would unacceptably dilute the market and again risk the community plan.

To address the above concerns, the City of Hillsboro asked JOHNSON REID to provide an analysis of commercial capacity for the AmberGlen Community Plan. Resulting analysis in this memorandum addresses the following questions in sequence:

1. What commercial retail capacity opportunity exists in present-day Hillsboro?
2. How much commercial retail demand is created by AmberGlen Community residents?
3. Of current and future commercial retail capacity, what types are most appropriate for the AmberGlen Community?

**WHAT COMMERCIAL RETAIL CAPACITY OPPORTUNITY EXISTS IN PRESENT-DAY HILLSBORO?**

To determine the existence of capacity for additional retail development in Hillsboro, a "Retail Gap" analysis was conducted for the incorporated City area. A Retail Gap analysis comprises the following calculation:

\[
(Hillsboro \text{ Resident Commercial Spending}) - (Hillsboro \text{ Retail Business Revenues}) = \text{City Retail Gap}
\]

For any particular year, 2008 for this analysis, potential commercial retail capacity or “gap” exists if resident spending exceeds reported retail sales by local businesses. In that case, Hillsboro residents are shopping or dining outside of the city because of a lack of commercial choices in Hillsboro or superior offerings elsewhere. This “gap” represents commercial activity potentially retained within Hillsboro if additional and/or more diverse retail commercial capacity existed for residents.

Alternatively, negative retail “gap” denotes commercial categories where Hillsboro businesses are successfully attracting spending by residents of other communities in excess of spending potential by Hillsboro residents. "Negative" in this case is somewhat of a misnomer because it does denote commercial success. However, for this analysis, negative “gap” represents commercial categories with limited potential for additional development because significant development and sales already exist in excess of local spending.

Figure 1 on the following page provides a detailed comparison of resident spending, local sales, and “gap.”
In 2008, Hillsboro residents spent a total of $1.460 billion within and outside of Hillsboro. The average household in Hillsboro spent approximately $49,278 on retail goods according to data from Claritas, Inc, a statistical data and research consulting firm and the U.S. Census Bureau.

Hillsboro-located commercial retail businesses reported an estimated $1.464 billion in sales in 2008.

Overall, Hillsboro consumer retail businesses attracted $3.8 million in spending in excess of resident spending potential.

Total retail sales figures indicate that across all categories of retail commercial, additional retail capacity may not exist. However, examination of detailed, individual retail category information determines many types of commercial opportunity do exist based on a lack of local sales relative to resident spending.

Categories of retail spending where additional commercial space capacity likely exist are slightly shaded and denoted by positive “gap” opportunity estimates in Figure 1 to the left. Categories of additional commercial opportunity include:

- All categories of furniture and furnishings;
- Most categories of electronics and appliance stores;
- Many hardware and gardening/outer stores;
- Convenience, specialty food, and beverage stores;
- Drug stores, cosmetics and personal care;
- Clothing and apparel stores;
- Book stores and periodicals; and
- Restaurants and dining.

Findings do indicate some capacity for department store retail, but we find the estimate likely results from a sales data misattribution to “Clothing Stores” and “Family Clothing Stores” by Claritas, Inc, the data provider.
In addition to potential, existing capacity demonstrated in Figure 1 on the previous page, residents of the AmberGlen Community can be expected to drive demand for commercial retail offerings within the community itself. Figure 2 below provides a detailed analysis of total commercial retail spending driven by community residents and resulting potential commercial space demand at full build-out. Two build-out scenarios were considered given currently unknown final residential unit counts for the community plan: 4,000 households, and 6,000 households.

**FIGURE 2: COMMERCIAL RETAIL SPENDING AND SPACE DEMAND SUPPORTED IN THE AMBERGLEN COMMUNITY $mil (2008)**

<table>
<thead>
<tr>
<th>Retail Commercial Category (NAICS)</th>
<th>Per Household Spending / Non-Automotive, Non-General Merchandise</th>
<th>Hillsgro Retail Spending $mil (AmberGlen Households)</th>
<th>Sales Support Factor / 4,000 6,000</th>
<th>Supported Retail Demand (SF) / 4,000 6,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>441 Motor Vehicles and Parts Dealers</td>
<td>$9,091 $4.4 $6.7</td>
<td>$36.4 $54.5 $171</td>
<td>234,000</td>
<td>351,000</td>
</tr>
<tr>
<td>442 Furniture and Home Furnishings Stores</td>
<td>$1,112</td>
<td>$4.4 $6.7</td>
<td>$213</td>
<td>23,000</td>
</tr>
<tr>
<td>443 Electronics and Appliance Stores</td>
<td>$1,128</td>
<td>$4.5 $6.8</td>
<td>$246</td>
<td>20,200</td>
</tr>
<tr>
<td>444 Building Materials and Garden Equipment</td>
<td>$4,481</td>
<td>$17.9 $26.9</td>
<td>$157</td>
<td>125,200</td>
</tr>
<tr>
<td>445 Food and Beverage Stores</td>
<td>$5,400</td>
<td>$21.9 $32.9</td>
<td>$384</td>
<td>62,800</td>
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<tr>
<td>446 Health and Personal Care Stores</td>
<td>$1,833</td>
<td>$7.3 $11.0</td>
<td>$283</td>
<td>28,500</td>
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<tr>
<td>448 Clothing and Clothing Accessories Stores</td>
<td>$2,254</td>
<td>$9.0 $13.5</td>
<td>$267</td>
<td>21,000</td>
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<tr>
<td>451 Sporting Goods, Hobby, Book and Music Stores</td>
<td>$966</td>
<td>$3.9 $5.8</td>
<td>$240</td>
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<tr>
<td>452 General Merchandise Stores</td>
<td>$5,504</td>
<td>$22.0 $33.0</td>
<td>$171</td>
<td>141,700</td>
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<td>453 Miscellaneous Store Retailers</td>
<td>$1,166</td>
<td>$4.7 $7.0</td>
<td>$236</td>
<td>21,700</td>
</tr>
<tr>
<td>722 Foodservices and Drinking Places</td>
<td>$4,435</td>
<td>$17.7 $26.6</td>
<td>$290</td>
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<tr>
<td><strong>Totals/Weighted Averages</strong></td>
<td>$37,450</td>
<td>$149.8</td>
<td>$224.7</td>
<td>779,200</td>
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</tbody>
</table>

**Non-Automotive, Non-General Merchandise**

<table>
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<tr>
<th>Capture</th>
<th>Community-Captured Spending (SF)</th>
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<tbody>
<tr>
<td>75%</td>
<td>302,600</td>
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<td>50%</td>
<td>201,800</td>
</tr>
<tr>
<td>25%</td>
<td>100,900</td>
</tr>
</tbody>
</table>

1/ Claritas, Inc. based on the U.S. Department of Commerce Consumer Expenditure Survey (CES)
2/ 2007 Dollars & Cents of Shopping Centers, Urban Land Institute
3/ Implicitly assumes a structural vacancy rate of 10% for commercial space

**SOURCE: JOHNSON REID, LLC**

- At full build-out, AmberGlen Community residents are estimated to spend between $149.8 million (4,000 households) and $224.7 million (6,000 households) on commercial retail offers annually in current dollars.
- Excluding automobile sales/parts and general merchandise because of incompatible formats (auto-dependent, typically large format), AmberGlen Community residents are estimated to spend between $91.4 million (4,000 households) and $137.1 million (6,000 households) at likely community plan-consistent commercial offerings annually in current dollars.
- Community-consistent commercial type demand translates into resident-supported commercial space demand ranging from 403,500 square feet (4,000 households) to 605,500 square feet (6,000 households).

Although resident-supported demand for commercial space is estimated between 403,500 and 605,500 square feet, the figures are very aggressive for AmberGlen community planning purposes. Although retail offerings may be compelling at AmberGlen, it is of course unreasonable to assume residents would spend all of their disposable income on-site. The bottom of Figure 2 provides resident-supported commercial demand at the AmberGlen Community if a local spending capture adjustment is made.

- Rather optimistically, if 75% of annual resident spending were captured within the community, between 302,600 and 454,100 square feet could be supported.
- Far more conservative, but more sustainable, would be a 25% capture rate for local resident spending resulting in supportable commercial retail space demand ranging from 100,900 to 151,400 square feet.
We would note that the above estimates of community-supportable retail space demand assume AmberGlen Community residents alone substantiate documented retail space need. It is also true that daytime population (employment and commuter stops) as well as non-resident spending (park visitors, community visitors, etc.) would also add to demand for commercial offerings on-site. However, such offerings would be more destination-oriented in nature and may not be planned for accommodation due to desire for transit-oriented development, pedestrian and bicycle orientation with limited automobile traffic conflicts. Accordingly, we would view the estimates in the bottom of Figure 2 as a sustainable commercial retail base case for the community.

**WHAT TYPES OF COMMERCIAL RETAIL CAPACITY ARE MOST APPROPRIATE FOR THE AMBERGLEN COMMUNITY?**

**Planning Policy and Commercial Implications**

As the AmberGlen Community Plan is revisited and commercial use designations are considered, planning guidelines for the district, though policy in nature, must be understood for their impact upon the viability and orientation of achievable commercial development on-site. Several factors in community planning will specifically indicate the orientation of commercial offerings on-site:

- **Commercial Destination?:** The nexus of Walker and Cornell, The Streets at Tanasbourne, the Tanasbourne commercial center, the planned Kaiser Permanente Westside Medical Center, and nearby medical office uses will continue to prove strong attractors for the nearby AmberGlen Community. A split diamond interchange at 185th & Sunset Highway further cements the district as a potential visitor destination. It is therefore highly plausible that the distinctive high-density residential development pattern ringing a centerpiece park will pose significant commercial gravity in support of higher base commercial development estimates expressed at the bottom of Figure 2.

- **Self-Sustaining Community?:** Alternatively, significant traffic access to and through the AmberGlen Community, if not thoughtfully planned, will result in pedestrian conflicts and noise that may impact the viability of various residential forms and urban-oriented commercial development intended for the district. Accordingly, policy preference may legitimately be expressed in terms of less dependence and accommodation for automobile-oriented visits, though supportable commercial development will be in the lower range of estimates at the bottom of Figure 2.

- **Daytime District or 16-Hour District?:** A key determinant in urban district success will be the offering of shopping, dining and entertainment for a full day duration. In other words, residents of high-density districts come to expect a reasonably wide variety of amenities nearby and at a variety of times during the day. This, in turn, places greater emphasis on the need for entertainment-oriented commerce to succeed in the district to maintain other later-evening dining and retail opportunities. A 16-hour district, however, will in turn be more of an attractor to outside residents and traffic and must be considered.

- **Aggregation of Commercial Amenity?:** The immediate access and visibility of the north end of the Community area along Walker poses a strength for attracting commercial retail development associated with and supported by higher-density residential development nearby and spreading south along the designated park space. The advantage will be earlier viability for appropriately scaled and oriented commercial development as visitor traffic will help substantiate feasibility of space. However, it must also be acknowledged that aggregation of commercial space to the north along Walker comes at the cost of convenience for residents further from the commercial core, particularly to the south and at the distant end of the park. The result is diminishing, if not negligible, positive impact of commercial aggregation at the north end of the park.

- **Dispersion of Commercial Amenity?:** Commercial development spread throughout the plan, or at least dispersed instead of one aggregation at the north end, will be far more convenient for residents of planned residential development and likely enhance viability of residential forms as a result. A longer, thin park also enhances pedestrian access to commercial opportunity in buildings across the
park. Alternatively, dispersed commercial retail has lower retail gravity, typically has higher risk associated, and therefore frequently poses higher financial risk to commercial development viability.

Basic Urban Commercial Retail Orientation

In our study of urban amenities and their impact upon mixed-use redevelopment in centers throughout the Portland Metro area, JOHNSON REID found a menu of commercial amenities common to nearly all districts studied. Further analysis indicated which commercial offerings actually have measurable impact upon residential purchase decisions. However, the mere common presence of the various amenities does certainly indicate district resident preferences for shopping and services in higher-density environments. Figure 3 below, taken from the Urban Living Infrastructure study, indicates the types of retail common to districts and their general descriptions.

### Figure 3: Commercial Retail Offerings Common to Portland Metro Urban Residential Districts

<table>
<thead>
<tr>
<th>#</th>
<th>Observed Retail Offerings</th>
<th>Urban Amenity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bakery</td>
<td>Gourmet or organic bakery for on-site or off-site consumption</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bar or Pub</td>
<td>A bar, pub or tavern specifically for on-site alcoholic beverages</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bicycle Shop</td>
<td>A retailer of new, used, and specialty bicycles and repair services</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Book Shop</td>
<td>Independent or specialty secular bookshop possibly with café</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Boutique Shop</td>
<td>Specialty/boutique retailer, typically clothes, baby items, or personal care</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Brewpub</td>
<td>Alcoholic beverages served with on-site beer and/or spirits made</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Bistro</td>
<td>Bistro or small sit-down restaurant - desserts and coffee featured</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Coffee/Espresso</td>
<td>Coffee and espresso drinks with some on-site pastry/food sales</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Fitness Gym</td>
<td>Private membership fitness/training centers or gyms</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Garden Store</td>
<td>Garden supply, flower sales and garden art</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Cinema</td>
<td>Single-screen downtown marquee cinema</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Music Shop</td>
<td>Local/independent music shop, typically non-mainstream music</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Gourmet/Exotic Restaurant</td>
<td>Unique full-service restaurant with specialty/chef-driven cuisine</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Spa</td>
<td>Full-service spa, typically offering massage, aromatherapy, etc.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Specialty Grocer</td>
<td>Grocers with mix of traditional, organics, specialty, and deli/prepared</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Wine Bar or Shop</td>
<td>On-site wine consumption, extensive selection for off-site, limited food</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: JOHNSON REID, LLC

With the possible exception of a specialty grocer (New Seasons, Whole Foods, etc.), cinema or a larger, destination brewpub, the vast majority of individual retail commercial offerings identified in other districts were smaller (10,000 square feet or smaller) and neighborhood or community-oriented, not regional retail in orientation even though districts such as Sellwood, Multnomah Village and others in aggregate have become shopping destinations due to the eclectic nature of the districts. In other words, limited parking, convenient to pedestrians and transit, and strong likely patronization of nearby residents were common. Analysis by JOHNSON REID, in fact, identified that commercial amenities most strongly impact residential redevelopment viability if they are within 1.5 blocks (330 feet) of the residential project.

**Conclusions**

JOHNSON REID conducted analysis and provided resulting discussion to answer three key questions regarding commercial retail need and capacity in support of revisiting the AmberGlen Community Plan. Each question, followed by a summary of findings is provided below:

1. What commercial retail capacity opportunity exists in present-day Hillsboro?

   Although we find that Hillsboro overall is a retail destination for residents and non-residents, we also find that five traditional store-oriented retail categories (Furniture/Home Furnishings, Electronics/Appliances, Building Materials/Garden, Health/Personal Care, Dining/Beverage Services)
demonstrate measurable retail "gap" whereby City residents are patronizing these categories outside of the City of Hillsboro and likely signal commercial opportunity under broadly positive financial conditions. Details of all specific retail and service categories identified to have current opportunity are found in Figure 1.

2. How much commercial retail demand is created by AmberGlen Community residents?

We find that if commercial retail configuration in the AmberGlen Community Plan aims to capture up to 50% of resident spending – optimistically – supported retail space in the community ranges from roughly 201,800 square feet (4,000 residential units) to 302,800 square feet (6,000 residential units).

More conservatively, if on-site commercial offerings capture at least 25% of community resident spending, the community can support between 101,000 square feet (4,000 residential units) and 151,400 (6,000 residential units).

The above commercial space estimates only reflect support by AmberGlen Community residents and do not assume support from non-residents (daytime traffic, destination shopping, etc.). Estimates are intended as a sustainable basis of commercial need and additional space demand would be determined by policy decisions by the City regarding the destination nature of the district and resulting traffic accommodation.

3. Of current and future commercial retail capacity, what types are most appropriate for the AmberGlen Community?

Before final commercial orientation can be determined, we find that policy questions should be settled regarding the desired format of commerce in relation to AmberGlen Community residential plans and transportation plans. Specifically:

- Is the Community a Destination (Higher Commercial) or Self-Sustaining (Lower Commercial)?
- Is the Community a Daytime District (Lower Commerce, Lower Residential Viability) or a 16-Hour District (Higher Commerce, Higher Residential Viability)?
- Is Commercial Aggregated (Higher Commercial Space and Viability, Likely Lower Residential Viability Impact) or Dispersed (Lower Commercial Space and Viability, Likely Higher Residential Viability Impact)?

The following resulting matrix summarizes policy choice and likely feasibility impact regarding the orientation of commercial space planned at the AmberGlen Community.

<table>
<thead>
<tr>
<th>Commercial Orientation</th>
<th>Commercial Viability</th>
<th></th>
<th>Residential Viability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhanced</td>
<td>Reduced</td>
<td>Enhanced</td>
</tr>
<tr>
<td>Destination</td>
<td>✓</td>
<td>✓</td>
<td>Traffic Planning Key</td>
</tr>
<tr>
<td>Self-Sustained</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daytime</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-Hour</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Aggregated</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Dispersed</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

It was also found that a common menu of commercial retail offerings is found in other downtown-type urban centers in the Portland metro area, the majority of which are smaller-oriented retail individually following a neighborhood or community center pattern (Figure 3). In aggregate, however, such as Sellwood or Multnomah Village, smaller commercial offerings are identified as a distinct, whole destination shopping district for non-resident households.
CONCLUSIONS

Ultimately, commercial retail policy orientation and configuration preferences must generally be decided to then determine specifics of commerce and residential interface in the AmberGlen Community Plan.

However, concurrent with this retail analysis is a financial analysis and comparison between mid-rise and high-rise mixed-use project viability. The impact of park space amenity as well as different retail commercial (urban living infrastructure) amenity upon the viability of mid-rise or high-rise forms has been explored. Please refer to that related memorandum by JOHNSON REID, LLC for detailed findings.
An emerging concern during the Amber Glen Community Plan process has been the ultimate viability of high-rise residential development as originally planned and the need for greater emphasis on mid-rise residential development in the plan. While the intention of either is certainly a planning policy decision, the economics of high-density residential development and its potential difficulties in a suburban environment – rather than an urban, city center environment – will certainly factor into the actual realization of intended forms.

Accordingly, the City of Hillsboro has retained JOHNSON REID to provide an analysis of the economic viability of high-density residential (re)development in the Amber Glen Community Plan. Findings from economic analysis are intended to inform planning policy decisions for the community moving forward, as well as to understand what public involvement may be required in the future to help overcome economic obstacles to higher-density redevelopment feasibility if they should expected.

To address the question of economic viability of high-rise and mid-rise residential forms in the Amber Glen Community Plan, JOHNSON REID specifically provides analysis to answer four key questions:

1. How do the economics of mid-rise residential and high-rise residential generally compare?
2. How does the viability of mid-rise and high-rise residential compare in Hillsboro?
3. What difference does central park and commercial amenity make?
4. How does redevelopment of existing improvements differ from vacant parcel development?

How do the economics of mid-rise residential & high-rise residential generally compare?

To answer the key questions in this analysis, we model condominium units assuming two alternative development forms: mid-rise lightweight steel construction and high-rise concrete and steel construction. Cost estimates for mid-rise and high-rise construction are based on data from R.S. Means. Cost data for low-rise condominium construction have been included for comparison purposes, but are likely high as the construction type is concrete-based rather than wood-frame, the preferable construction type from a cost perspective. We would anticipate that wood-frame construction is achievable at $80 per square foot, or roughly 33% below costs expressed in Figure 1.

**Figure 1: Low-, Mid- and High-Rise Condominium Development Construction Costs (2009 Union Wages)**

<table>
<thead>
<tr>
<th>Condominium</th>
<th>Average Units</th>
<th>Average Sq. Ft./Unit</th>
<th>Total Space</th>
<th>Project Cost</th>
<th>Cost/Unit</th>
<th>Cost/Sq. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Rise</td>
<td>100</td>
<td>1,000</td>
<td>100,000</td>
<td>$11,987,000</td>
<td>$119,870</td>
<td>$120</td>
</tr>
<tr>
<td>Mid-Rise</td>
<td>100</td>
<td>935</td>
<td>110,000</td>
<td>$18,355,000</td>
<td>$183,550</td>
<td>$167</td>
</tr>
<tr>
<td>High-Rise</td>
<td>250</td>
<td>850</td>
<td>250,000</td>
<td>$53,111,000</td>
<td>$212,444</td>
<td>$212</td>
</tr>
</tbody>
</table>

SOURCE: R.S. Means and Johnson Reid, LLC
The following definitions are used to clearly delineate the three classes of residential construction:

- **Low-Rise**: Up to four stories of wood-frame, attached residential product overwhelmingly utilizing surface parking. Hillsboro code does allow four stories over concrete podium with tuck-under parking, however.

- **Mid-Rise**: 4 to 6 stories of concrete and steel construction, attached residential product usually depending upon structured parking.

- **High-Rise**: 7 or more stories of concrete and high-load steel construction overwhelmingly dependent upon structured parking, though usually occurring in highly dense areas where parking ratios are reduced.

While more than double the number of units is achieved (250 versus 100) in a high-rise development versus a mid-rise development, the cost of construction is substantially higher requiring a much higher level of pricing in order to be viable. Significant per-unit and per-square foot cost transition occurs between each general structure class as largely wood-frame in low-rise gives way to increasingly costly steel-based engineering. High-rise construction (seven or more stories) is seen primarily in the Pearl and South Waterfront Districts, which have the highest supportable price levels and land values.

As a means of comparison, it is helpful to consider how the cost for condominium development compares to pricing currently available in the market:

- Recent estimates of closed sales of new construction in Hillsboro since the beginning of the year indicate attached units sell on average at $140 per square foot (higher than the cost of low-rise construction but lower than the cost of mid-rise construction).

- The average sale price for the same period in Washington County is approximately $159 per square foot.

- Attached units in the Inner Westside (Central City Portland) have recently sold for $335 per square foot during the same period.

It is important to note that mid-rise residential, much less high-rise residential, is significantly lacking in both the Hillsboro market as well as the greater Washington County/Westside area. The lack of mid- and high-rise developments complicates analysis of sales prices necessary for higher-density development because no true case study examples exist. Alternatively, lack of existence of such examples is also an indicator of the likely difficult economics of mid-rise and high-rise residential.

Figure 2 illustrates the relationship between condominium sale price (per square foot), land prices (per square foot), and highest and best use. As land value increases, moving right along the horizontal axis, highest and best use is denoted by the lowest line on the chart, which represents lowest price a home buyer would have to pay.

Currently, at an average sales price of $140 per square foot, Hillsboro is well below the pricing necessary to motivate private development of mid-rise construction.

Under the assumptions used, wood-frame condominium units are able to pay the highest land values when the achievable sales prices are $300 per square foot or below. When pricing rises above this level, mid-rise housing delivers the highest residual land values up to about $400 per square foot, when high-rise development becomes the highest and best use assuming a developer would require no less than 15% return on cost for the risk of development.
In Figure 2, as land values rise, the construction cost advantage of lower density construction is offset by the higher land costs associated with lower intensity of use. Construction costs per square foot tend to increase as densities increase, with higher costs associated with shifts to concrete and steel construction. In general, the increase in either sales price or achievable lease rates associated with alternative construction types is insufficient to offset the higher costs. The key benefit from a financial perspective of changing densities through construction type is a higher yield, in terms of leasable square footage or units, associated with particular land parcels. As a result, higher underlying land values can change the financial equation to favor higher density development forms.

**How Does the Viability of Mid-Rise & High-Rise Compare in Hillsboro?**

The key challenge illustrated by previous analysis is that the development of mid-rise residential and even higher-density projects in most suburban areas usually requires pricing not currently attainable in those markets. While a regulatory action setting minimum densities that precluded low-rise condominiums would make mid-rise construction the highest and best use of the property, no development activity would be expected to occur without substantive subsidy. Rising achievable sales prices, or rents in the case of apartments, would cause mid-rise development to make financial sense. But precluding development until achievable rent levels rise would not support the development necessary to provide the amenity level required for higher rents.

To specifically illustrate financial viability regarding higher-density development slated for the AmberGlen Community Plan, a series of prototypical pro formas were generated to contrast the financial viability of mid-rise condominium development and high-rise condominium development. Figure 3 on the following page provide a summary of results. Before exploring results and their implications, the following assumptions must be understood:

- *Mid-Rise Condominiums Prototype:* 100 residential units on a one-half acre parcel.
- *High-Rise Condominiums Prototype:* 250 residential units on a one-half acre parcel.
- **Land and Price Characteristic:** In both cases, a one-half acre vacant parcel at a cost of $10 per square foot consistent with vacant parcel market price in the AmberGlen Community study area according to the Washington County Assessor’s Office.

- **Mid-Rise Development Cost:** $167 per square foot consistent with Figure 1 and reflective of concrete and steel frame construction.

- **High-Rise Development Cost:** $212 per square foot consistent with Figure 1 and reflective of higher-load concrete and steel frame construction.

- **Residential Price Assumption:** JOHNSON REID assumed all residential units achieve a base price of $215 per square, which is rather optimistic for the Hillsboro and Washington County market currently demonstrating $140 per sq. ft. to $160 per sq. ft. We view it in the realm of possibility, however, or at least reflective of a potential unit sale price over a five-year time period.

To answer the viability comparison question, please refer to the “Baseline” scenario for mid-rise and high-rise development in Figure 3. The “Baseline” scenario analyzes project financials without consideration for either park space or commercial amenity premiums as previously discussed in JOHNSON REID analysis. Implications of park space and urban commercial amenity are explored in the next section.

Key figures for consideration in Figure 3 are numbered in the far left hand column and discussed below:

1. The overall project cost, including land acquisition and construction costs, for a high-rise unit is approximately 26% higher than for a mid-rise unit.

2. Net pre-tax profit for both mid-rise and high-rise construction under the “Baseline” scenario is negative, indicating optimistic sales prices and sales revenue (3) assumed in this analysis is not enough to justify development costs (1).

3. Return on cost, or net pre-tax profit (2) divided by overall project cost (1), is negative for both mid-rise (-17.5%) and high-rise (-40.7%), but certainly lower for the former. In other words, neither form is feasible all else equal.

4. Indicated Viability Gap indicates the extent to which pre-tax profit falls short in ensuring at least a 15% return for the developer’s risk in the project. The viability gap for both mid-rise and high-rise is significant, all else equal, but mid-rise certainly comes closer than high-rise to meeting the 15% return on cost threshold.
Given these findings, it is worth noting that the urban renewal model in other jurisdictions has been to invest public resources to mitigate the indicated viability gap, in this case significant for both residential development forms. A second model is emerging, however, that targets public resources for successful recruitment of urban commercial amenities that not only enhance an individual project’s feasibility, but also enhances the viability and desirability of an entire district or community. The implications of this approach are modeled in the following section.

Source: Johnson Reid, LLC

<table>
<thead>
<tr>
<th>PROJECT DETAILS</th>
<th>Mid-Rise Condominium</th>
<th>High-Rise Condominium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units:</td>
<td>100 100</td>
<td>250 250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LAND ACQUISITION</th>
<th>Baseline W/Premiums</th>
<th>Baseline W/Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed Density (Units/Acre):</td>
<td>200 200</td>
<td>500 500</td>
</tr>
<tr>
<td>Land Price/SF:</td>
<td>$10 $10</td>
<td>$10 $10</td>
</tr>
<tr>
<td>Land Acquisition:</td>
<td>$217,800 $217,800</td>
<td>$217,800 $217,800</td>
</tr>
<tr>
<td>Construction Cost/Unit:</td>
<td>$229,438 $229,438</td>
<td>$292,111 $292,111</td>
</tr>
<tr>
<td>Construction Cost/Total:</td>
<td>$22,943,750 $22,943,750</td>
<td>$73,027,625 $73,027,625</td>
</tr>
</tbody>
</table>

| Overall Project Cost: | $23,161,550 $23,161,550 | $73,245,425 $73,245,425 |
| Overall Cost Per Unit: | $231,616 $231,616 | $292,982 $292,982 |

<table>
<thead>
<tr>
<th>INCOME</th>
<th>Baseline W/Premiums</th>
<th>Baseline W/Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units:</td>
<td>100 100</td>
<td>250 250</td>
</tr>
<tr>
<td>Average Sales Price</td>
<td>$201,025 $266,358</td>
<td>$182,750 $242,144</td>
</tr>
<tr>
<td>Average Unit Size/S.F.:</td>
<td>935 935</td>
<td>850 850</td>
</tr>
</tbody>
</table>

**Specialty Grocer Premium @ 17.5%**
|                | $0 | $38 | $0 | $38 |

**Adjacent Park @ 15.0%**
|                | $0 | $32 | $0 | $32 |

Gross Sales Income:
|                | $20,102,500 | $26,635,813 | $45,687,500 | $60,535,938 |

<table>
<thead>
<tr>
<th>EXPENSES</th>
<th>Baseline W/Premiums</th>
<th>Baseline W/Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Costs @ 5%</td>
<td>$1,005,125</td>
<td>$1,331,791</td>
</tr>
</tbody>
</table>

| Total Expenses | $1,005,125 | $1,331,791 | $2,284,375 | $3,026,797 |

<table>
<thead>
<tr>
<th>NET PRE-TAX PROFIT</th>
<th>Baseline W/Premiums</th>
<th>Baseline W/Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-$4,064,175</td>
<td>$2,142,472</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>VIABILITY GAP PROFIT</th>
<th>Baseline W/Premiums</th>
<th>Baseline W/Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Cost</td>
<td>-17.5%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Threshold Return</td>
<td>15.00%</td>
<td>15.00%</td>
</tr>
</tbody>
</table>

**Indicated Gap**
|                | ($7,538,408) | ($1,331,761) | ($40,829,114) | ($26,723,098) |
WHAT DIFFERENCE DOES PARK & COMMERCIAL AMENITY MAKE?

In the 2007 report “Urban Living Infrastructure: Marginal Impact of Selected Urban Amenities on Residential Pricing” for the Metro Transit-Oriented Development Program, JOHNSON REID conducted a detailed, hedonic model analysis, case study and developer interview process to identify what commercial retail and service offerings actually affect buyer behavior to enhance higher-density residential viability. Specifically, a range of common urban commercial amenities were econometrically tested to measure actual impact to home sale price in a manner that would help overcome the condominium price problem identified in the previous section.

In reality, some commercial amenities are so valuable to households that having them within walking distance allows them to pay more for a condominium instead of spending the money on annual transportation expense getting to and from individual and groups of commercial needs. A detailed treatment of the commercial amenities and their measurement are beyond the scope of this analysis and the reader is invited to reference that document. However, to demonstrate how successful attraction of a “measurable” amenity can impact development viability, JOHNSON REID conducted a second set of prototypical pro formas assuming the AmberGlen Community featured the following key, marketable amenity examples:

- Specialty Grocer (17.5% Premium) – The combination of specialty foods, specialty deli, flowers, gifts and café under one roof and within two blocks has been measured to achieve a nearly 18% premium for a residence, all things equal.
- Centerpiece Park (15% Premium) – Based on previous analysis for the City of Hillsboro, a centerpiece park adjacent to a high-density residential project can achieve a measurable premium.

Results of the second financial analysis are expressed in Figure 3 on the previous page as the “W/Premiums” scenario for both mid-rise and high-rise condominiums. The second analysis differs from the first only due to the addition of both the specialty grocer and park amenity premium addition. Key figures for consideration in Figure 3 are numbered in the far left hand column and discussed below:

- The specialty grocer amenity is found to add a $38 per square foot premium to the base condominium price.
- The centerpiece park is found to add a $32 per square foot premium to the base condominium price.
- Adding the two amenities actually creates a positive, net pre-tax profit for mid-rise construction under the “W/Premiums” scenario due to the boost in achievable price. The amenities are, however, not enough to create a positive profit for the higher construction-cost high-rise orientation.
- Return on cost, or net pre-tax profit (\(\text{ROI}\)) divided by overall project cost (\(\text{PC}\)), is 9.3% for the mid-rise type but still negative for high-rise (-21.5%), though the amenities appear to have reduced the negative rate of return on high-rise by half.
- Despite the boost in achievable price and resulting positive profit and return on investment, the Indicated Viability Gap for mid-rise is still negative. The 9.3% return on cost is still below the minimum threshold 15%, indicating that although the project is profitable, the amount of profit is not worth the considerable risk of development. To the developer, other projects with higher opportunity cost are worth exploring rather than this scenario. Indicated viability gap is negative for mid-rise and high-rise, though considerably lower than without the marketable premium examples.
**HOW DOES REDEVELOPMENT OF EXISTING IMPROVEMENTS DIFFER FROM VACANT PARCEL DEVELOPMENT?**

The economics of mid-rise and high-rise condominium development stand to differ significantly over time in the AmberGlen Community planning area given a mix of both vacant parcels and parcels with improvements frequently comprising business park space. To illustrate the implications of redevelopment of existing improvements in contrast to vacant land, the mid-rise and high-rise formats were modeled assuming a different land cost that reflects existing improvement value. Results are expressed in Figure 4.

**FIGURE 4: STATIC PRO FORMA EVALUATION OF HILLSBORO MID-RISE AND HIGH-RISE CONDOMINIUM REDEVELOPMENT**

<table>
<thead>
<tr>
<th>PROJECT DETAILS</th>
<th>Mid-Rise Condominium</th>
<th>High-Rise Condominium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units:</td>
<td>100 100</td>
<td>250 250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LAND ACQUISITION</th>
<th>Mid-Rise Condominium</th>
<th>High-Rise Condominium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed Density (Units/Acre):</td>
<td>200 200</td>
<td>500 500</td>
</tr>
<tr>
<td>Land Price/SF:</td>
<td>$32 $32</td>
<td>$32 $32</td>
</tr>
<tr>
<td>Land Acquisition:</td>
<td>$686,070 $686,070</td>
<td>$686,070 $686,070</td>
</tr>
<tr>
<td>Construction Cost/Unit:</td>
<td>$229,438 $229,438</td>
<td>$292,111 $292,111</td>
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<tr>
<td>Construction Cost/Total:</td>
<td>$22,943,750 $22,943,750</td>
<td>$73,027,625 $73,027,625</td>
</tr>
</tbody>
</table>

| Overall Project Cost: | $23,629,820 $23,629,820 | $73,713,695 $73,713,695 |
| Overall Cost Per Unit: | $236,298 $236,298 | $294,855 $294,855 |

<table>
<thead>
<tr>
<th>INCOME</th>
<th>Mid-Rise Condominium</th>
<th>High-Rise Condominium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units:</td>
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</tr>
<tr>
<td>Average Unit Size/S.F.:</td>
<td>935 935</td>
<td>850 850</td>
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<tr>
<td>Specialty Grocer Premium @ 17.5%</td>
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<td>$0 $38</td>
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<tr>
<td>Adjacent Park @ 15.0%</td>
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<td>$0 $32</td>
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<td>Gross Sales Income:</td>
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<td>$45,687,500 $60,535,938</td>
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<tr>
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<td>$20,102,500 $26,635,813</td>
<td>$45,687,500 $60,535,938</td>
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<th>EXPENSES</th>
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<tbody>
<tr>
<td>Sales Costs @ 5%</td>
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<td>$2,284,375 $3,026,797</td>
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<tr>
<td>Total Expenses</td>
<td>$1,005,125 $1,331,791</td>
<td>$2,284,375 $3,026,797</td>
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<th>NET PRE-TAX PROFIT</th>
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<th>VIABILITY GAP ANALYSIS</th>
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<tr>
<td>Return on Cost</td>
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<tr>
<td>Threshold Return</td>
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<td>15.00% 15.00%</td>
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<tr>
<td>Indicated Gap</td>
<td>(8,076,918) (1,870,271)</td>
<td>(41,367,624) (27,261,609)</td>
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Source: Johnson Reid, LLC

In Figure 4, mid-rise and high-rise developments assumed to be developed on redeveloped parcels are considered under the same two scenarios utilized in Figure 3. The only difference the analysis featured in Figure 3 and Figure 4 is the price of land. In Figure 3, the price of land is assumed to be $10 per square foot while in Figure 4 it is assumed to be $32 per square foot, capitalizing the cost of demolition into land acquisition. As is demonstrated, net pre-tax profit decreases across the board, while return on cost and...
indicated viability gap increase due to the sizeable increase in effective land cost. Amenity premiums certainly continue to render mid-rise development closest to viability, but return still falls short of threshold rate of return for the risk involved.

The primary impact of a relatively high perceived level of risk is the resulting impact on acceptable rate of return. Increasing the return threshold can dramatically impact development activity. Risk is also a particular concern when dealing with redevelopment, where construction cost estimates and timing are less predictable. In addition, the scale of most infill and redevelopment opportunities is limited, while the complexity is substantially higher. This increases soft costs relative to the overall level of investment, decreasing yield.

**IMPLICATIONS AND CAVEATS**

As demonstrated in the pro formas, the highest and best use determination resembles a step function in terms of the development form that supports the highest underlying land values. If achievable sales prices are below $200 per square foot, the development form capable of bidding the greatest value for the property is wood frame construction with surface parking. As pricing increases to $300 per square foot, mid-rise construction over a concrete podium become the land use that supports the highest values. High-rise construction becomes the highest and best use only when pricing rises above $450 per square foot under these assumptions.

It should be noted that these types of prototypical pro formas imply a level of precision that is not completely indicative of all developer behavior. Developers use a range of return parameters and yield requirements in making decisions, costs can vary substantively, and assumptions with respect to the market area can also vary. As a result, a series of developers looking at the same project may have sharply divergent views as to what development form represents the highest and best use for that site and the associated supportable land value.

Nonetheless, the general relationship between costs and achievable price remains a constant. The physical form of residential development is determined primarily by achievable pricing. It should also be noted that expectations of pricing and perceived market risk also have a significant impact on the determination of highest and best use. To the extent that a project can "prove" or demonstrate that a market exists for an untested product and that certain pricing levels are achievable, the project can increase expectations and/or reduce perceived risk. This shifts the market further along the path towards more intensive development forms.

**CONCLUSIONS**

JOHNSON REID was retained by the City of Hillsboro to provide financial analysis of mid-rise and high-rise residential development to help inform the AmberGlen Community planning process. In doing so, four key questions were addressed and answered as follows:

1. How do the economics of mid-rise residential and high-rise residential generally compare?

Mid-rise and high-rise residential development are frequently challenging in a suburban location because the significant increase in construction costs per unit with steel and concrete materials are rarely justified by attached residential price levels in the suburbs. Hillsboro/Washington County specifically is currently achieving roughly $140 per square foot to $160 per square foot in unit sales prices, while construction costs are easily $167 per square foot for mid-rise and $212 per square foot high-rise.
2. How does the viability of mid-rise and high-rise residential compare in Hillsboro?

A series of prototypical mid-rise and high-rise development financial pro formas were conducted to compare viability of both in Hillsboro, all else equal. On a vacant parcel, and assuming a somewhat optimistic sales price per square foot in Hillsboro, we found (Figure 3):

- Mid-rise residential construction fails the viability test in terms of negative pre-tax profit, negative return on cost and resulting significant viability gap given the failure to achieve an assumed minimum return on cost of 15% for risk of the venture to be worthwhile.

- High-rise residential construction also fails the viability on all counts, but significantly worse than mid-rise due to the significant cost-per-unit increase from a higher-load concrete and steel construction type necessary for 7 stories or more.

3. What difference does central park and commercial amenity make?

A second set of financial pro formas were conducted for both mid-rise and high-rise on a vacant parcel assuming two key urban living amenities were well-executed and highly proximate to the residential development. Again, assuming an optimistic sales price in Hillsboro, we found (Figure 3):

- Mid-rise residential construction posted positive pre-tax profit and a positive return on cost of over 9%, but barely failed the viability test because the project falls short of the minimum 15% return on cost threshold. In other words, although the project is profitable, to a developer it is not quite profitable enough to warrant the risk of the project.

- High-rise residential construction still fails the viability test on all counts, but the addition of the focused amenities significantly reduced the viability gap.

4. How does redevelopment of existing improvements differ from vacant parcel development?

A third set of financial pro formas were conducted for mid-rise and high-rise, with and without focused urban amenities, but this time assuming a $32 per square foot land cost including existing business park improvements instead of a $10 per square foot vacant parcel cost. Both figures are for actual parcels in the AmberGlen Community Plan study area nearby the existing, central landscaped space according to the Washington County Assessor’s Office.

- Mid-rise residential construction still posted positive pre-tax profit and a positive return on cost of over 7%, but as a result failed the viability test by falling short of the 15% minimum return on cost threshold.

- High-rise residential construction still fails the viability test on all counts.

Next Steps

Analysis in this memorandum has found that in Hillsboro’s suburban location, residential pricing is not yet at a level that will enable the economics of mid-rise residential to “pencil out,” much less high-rise residential development. However, we would conclude that the results are encouraging for planning greater emphasis on mid-rise residential development forms at least in earlier phases of the plan.

- Mid-rise barely failed the viability test when it was assumed specialty grocery centerpiece park amenities were well-executed and highly proximate to a project.

- Financial modeling utilized near-term, though optimistic, sales price assumptions for AmberGlen, though the plan is longer-term and will likely materialize over several real estate cycles with increasing prices relative to cost and land value over time.
Financial assumptions were very specific, particularly the minimum return on cost threshold of 15%. Some developers may perceive the AmberGlen Community concept as lower-risk and develop with different acceptable return expectations and higher viability probability.

Accordingly, we would encourage the City of Hillsboro to do the following based upon findings:

- Pursue mid-rise residential forms as an earlier and more prevalent component of the AmberGlen Community Plan.
- Delay or rethink placement of high-rise residential forms in the plan, potentially to sites with existing improvements that in time will depreciate in economic value relative to land price escalation.
- Pursue public resources paired with economic development strategy that encourages and rewards specific types of commercial and services development in the AmberGlen Community that will have measurable impact upon the economics of mid-rise and high-rise development. This may be via urban renewal, targeted SDC credits, or some other incentive(s). Unlike a subsidy to a specific condominium project, a successful urban amenity will increase the viability in more than one project via a “halo effect.”
MEMORANDUM

DATE: April 7, 2009

TO: Colin Cooper, Hillsboro Current Planning Supervisor

FROM: Bill Reid, Principal
John Johnson Reid, LLC

SUBJECT: Urban Amenity Values Associated with Public Park Space

As part of the AmberGlen Community Plan urban center planning process, the City of Hillsboro seeks to understand the value of improved City park space as an urban amenity and development catalyst for planned high-density mixed-use development. This memorandum presents objective findings related to the issue at hand for utilization by the City and the AmberGlen Community Plan Steering Committee to refine conceptual planning completed to date.

The scale and intensity of the planned AmberGlen Community Plan center has no precedent in the Portland metro area suburbs. Portland’s South Waterfront is perhaps the most comparable effort in the metro area to date. Accordingly, a two-step approach to identify the market value of improved park space as an amenity and catalyst to high-intensity redevelopment in Hillsboro was undertaken:

1. **Overview of Park Space Value as an Urban Amenity**: A review of real estate and land use studies that have credibly documented the value of park space on urban residential development, largely reflecting precedent in other markets nationwide.

2. **Portland Metro Market Findings**: Analysis of various urban residential sales data in the Portland metro area to identify the value of proximate park space on home prices by the unique population demographics of the Portland metro area and, therefore, financial viability on planned residential development within the AmberGlen Community Plan concept.

**Urban Amenity Value & High-Density Residential Development Feasibility**

The primary question for the City of Hillsboro in planning unprecedented residential products in the AmberGlen Community is the following: What amenities including park space help to “catalyze” increased-density residential development nearby. From an economic perspective, success of the AmberGlen Community Plan will greatly depend upon the package of nearby amenities that potential community residents find not only desirable, but **desirable enough** for households to pay market prices and/or rents that will justify higher-density residential development. It is generally true that as building heights increase, particularly above three stories, construction expenses increase not only due to scale of building size, but also fundamental change in materials to higher-cost steel-based engineering and materials.

Industry experience indicates that urban-oriented, high-intensity districts depend upon the amenity trade-off for reduced dependence upon automobile transportation for three key areas of daily activity:

1. **Employment – Proximate or connected employment centers**;
2. **Recreation – Parks, trails and other opportunities for outdoor recreational activities; and**
3. **Entertainment – Shopping, services and entertainment offerings in a 16-hour+ district.**

In other words, households can be willing to divert their automobile-related transportation expenses associated with traditional, suburban residential form into attached urban residential forms **provided the convenience and connection to daily activities is highly proximate to the high-density residential choice.** To the
extent that a menu of urban amenities and services is maximized and associated with the residential opportunity, or capitalized into the value of the home purchase, the higher market price of the home can help to economically justify the higher costs of mid-rise and high-rise construction that to date has only occasionally been justified within or proximate to the Portland CBD.

Park space, therefore, is but one ingredient in a complicated recipe for high-density residential development.

**Overview of Park Space Value as an Urban Amenity**

The value of park space as an amenity generally to communities and specifically residential development is one of the oldest issues of study in both planning and real estate economics, extending to 1926 analysis of the financial return of New York’s Central Park.1 Open space, and specifically urban park space, are long established as important public investments for maintaining robust, healthy communities – assuming they are well-maintained and safely managed. Traditionally, real estate economic analysis has focused on the question:

- Does enhanced property tax revenue generated by new real estate development justify the expense of creating new park space?

The goal of the community planning effort, therefore, has traditionally been the achievable end benefit of creating new park space with fiscal interest in recovering public investment via enhanced property values.

With greater emphasis on higher-density real estate uses in support of land use efficiency benchmarks nationwide – in many ways led by the Portland metro area – the means and end have reversed. Of more recent interest has been the marginal economic value of open space in facilitating specific residential investment forms, specifically in public redevelopment initiatives. In other words, economic analysis has focused on the cost of public park/open space as an urban community amenity with capitalized value in higher-density residential uses which face riskier financial feasibility, particularly in a suburban environment where high density residential product is usually far less market-tested and competitive with a much greater stock of traditional, detached single-family residences.

Whatever the geographic setting, and the topic has been thoroughly documented in most major metro areas of the country over the last 80 years, JOHNSON REID would anticipate the following real estate economic characteristics of park amenity to generally hold true for the AmberGlen Community Plan project:

- Capitalization of the benefits of public park space into residential development is typically concentrated between 500 and 3,000 feet from park space, with declining benefit as distance increases.2
- Park space design maximizes value capitalization with the “Edge Principal,” i.e. longer narrow parks with greater edge are of higher value than parks with wider or round parks.3
- Parks with emphasis on natural areas (woods, ponds, etc.) exhibit higher value capitalization than improved, flat open spaces for social or athletic functions.4
- Although numerous empirical studies have been conducted nationwide with a diverse array of results, in general larger, passive-use and well-maintained parks add anywhere from 10% to 20% additional value to residential development within 3-4 blocks, all else equal.5

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Nearly all of the above studies focused on a diversity of urban residential form, i.e. attached residential development as well as detached, and capitalized property values associated with parks. A study of parks and capitalized values within the City of Portland in 2000, which largely focuses on detached, single-family housing actually found less marginal impact of parks on prices and, therefore, premiums paid by households to live near parks. Findings of the study indicated:

- Overall, park space proximity displayed a 1.43% price premium to nearby, largely single-family homes;
- Golf course open space by far exhibited the greatest price premium estimated at 5.97%;
- General public park space benefited proximate homes by 1.28% on average.

**PORTLAND METRO MARKET FINDINGS**

Although evidence from other metropolitan areas and one study of the Portland area focusing on single-family development are useful, examination of recent market behavior for comparable urban residential initiatives is useful. The Portland metro area has three primary neighborhoods of residential towers analogous to the vision for the AmberGlen Community Plan: the Pearl District, Downtown, and the South Waterfront. Somewhat unfortunately for the sake of this analysis, all three neighborhoods have multiple parks and all of the condominium towers are within close walking distance of a park thus the value of parks in isolation cannot be determined.

However, with respect to parks, contrasts can be drawn:

- While the neighborhoods all have their condominium developments near parks, the South Waterfront is superior in terms of parks and natural amenities. Every condominium either borders the under-construction Neighborhood Park or has frontage on the Willamette River.
- Downtown does not fare quite as well for parks or natural amenities as the South Waterfront, though most of the condominium towers either have Willamette River frontage or are near the South Park Blocks.
- While there are two new small parks, a larger park under construction, and the North Park Blocks, parks and natural amenities play the smallest role in the Pearl District.

**Pearl District**
The North Park Blocks line the eastern portion of the Pearl District between NW Park Avenue and NW 8th Avenue, Jamison Square consists of a city block at the intersection of NW 11th Avenue and NW Johnson Street, and Tanner Springs consists of a city block at the intersection of NW 11th Avenue and NW Marshall Street. Plans for The Fields, in the northern portion of the Pearl, call for three acres of greenspace with trails, playing fields, and a children’s play area. There are four recently constructed condominium towers in the Pearl, The Casey, The Metropolitan, the 937 Condominiums, and The Encore.

- The Casey had four closed sales over the past six months, averaging $1.7 million, or $591 per square foot. The Casey, on average, is the most expensive major condominium development on an absolute basis in the history of Portland, despite being four blocks from the North Park Blocks and six blocks from Jamison Square.
- The Metropolitan had nine closed sales over the past six months, averaging $1.1 million, or $652 per square foot. The Metropolitan, had the highest per-foot pricing in the past six months of the observed

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Pearl developments, in part due to the sale of a penthouse for $2.5 million, or $743 per square foot. The Metropolitan is situated roughly a block south of Tanner Springs Park and a block north of Jamison Square.

- The 937 Condominiums had five closed sales over the past six months, averaging $371,500, or $384 per square foot. Pricing at the 937 Condominiums was brought down by a couple lower-level units that did not include parking. The 937 Condominiums are located a block east of the North Park Blocks.
- The Encore had one closed sale over the past six months, a 725 square-foot unit located on the sixth floor. The unit sold for $259,000, or $357 per square foot. While The Encore is located next to The Fields and is close to Tanner Springs, its relative isolation from retail amenities and employment, as well as its proximity to the rail yards, has hurt its achievable pricing and absorption.

**Downtown**
The residential towers in Downtown are located either in the West End, between SW 11th Avenue and Portland State University, or in RiverPlace, at the south end of Downtown’s waterfront. The primary condominium towers in the West End, the Eliot Tower and the Benson Condominiums, are two blocks west of the South Park Blocks. The major RiverPlace development, The Strand, is located at the south end of Tom McCall Waterfront Park.

- The Eliot Tower had four closed sales over the past six months, averaging $480,700, or $413 per square foot. The Eliot Tower has the best finishes of any condominium development in the West End and benefits from its location near cultural amenities, Downtown employment, and the South Park Blocks.
- The Benson Tower had one closed sale over the past six months, a 557 square-foot unit located on the fourteenth floor. The unit sold for $245,000, or $440 per square foot. The Benson Tower is located two blocks south of the Eliot Tower.
- The Strand had ten closed sales over the past six months, averaging $737,800, or $425 per square foot. The Strand benefits primarily from its views up the Willamette River and proximity to Downtown employment.

**South Waterfront**
The South Waterfront has two primary park spaces, the Neighborhood Park and the River Greenway. The Meriwether and Atwater Place are located along the River Greenway and east-facing units offer unobstructed views of the Willamette River and Mount Hood. The John Ross is located a block inland and borders the Neighborhood Park. The only condominium tower in the South Waterfront, constructed to date, without frontage along either greenspace was the 3720 Condominiums. During construction, the 3720 Condominiums were converted to rentals and the project was renamed The Ardea.

- The Meriwether had six closed sales over the past six months, averaging $695,200, or $388 per square foot. The Meriwether, the first of the condominium towers in the South Waterfront, fronts the Willamette River and was successful in rapidly selling the majority of its units when sales began in 2005.
- Atwater Place had four closed sales over the past six months, averaging $845,300, or $447 per square foot. Like The Meriwether, Atwater Place fronts the Willamette River, but its later release has slowed its sales significantly.
- The John Ross had five closed sales over the past six months, averaging $327,600, or $309 per square foot. The John Ross, the tallest of the condominium towers in the South Waterfront at 325 feet, has frontage along the Neighborhood Park. After a strong opening month, sales activity has been very slow the past two years and resales are typically priced well below their original purchase price.
PORTLAND URBAN, HIGH-DENSITY RESIDENTIAL SALES IN THE PAST SIX MONTHS

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Neighborhood Comparison

Despite offering the least, in the way of parks and natural amenities, the Pearl District achieved the highest pricing over the past six months, both absolute and per square foot as verified by comprehensive sales statistics in the figure above. While the Pearl ranks third in parks of the three neighborhoods, it has the second best location in terms of employment and the best location in terms of commercial amenities. As the most established high-density-residential neighborhood in Portland, the Pearl has a critical mass of retail, restaurants, and entertainment options for urban condominium dwellers. Downtown is the best location from an employment standpoint but is not suited as well for residential living as the Pearl. The South Waterfront achieves the lowest pricing of the observed neighborhoods, largely because of its separation from both Downtown employment and Pearl amenities. While there are a couple restaurants and OHSU employment, there is not the critical mass required to make the neighborhood self sufficient.

CONCLUSIONS & NEXT STEPS

JOHNSON REID was retained by the City of Hillsboro to begin a market-based assessment of feasibility issues for the evolving AmberGlen Community Plan process. The first area of focus for the City is regarding the value of a central, urban park as a catalyst for higher-density residential development. In other words, of interest are the following:

1. What type of parks facilitates higher density urban redevelopment? and
2. How much economic value is created by open space that is capitalized into the value of proximate residences, thus assisting the economics of redevelopment?

After review of a robust body of real estate economic studies conducted nationwide, as well as a remarkable laboratory for case study within the City of Portland CBD, we conclude the following:

- A sizeable central park maximizing proximity to urban residential forms will economically benefit the feasibility of redevelopment.
- The creation of a distinct park amenity will likely provide proximate residential development with a 10% to 15% price premium compared to comparable redevelopment not located proximate to such a park.
- Design of the park should have the following in mind: maximum edge for greater proximity to a greater number of residential projects, passive use, concentration on unimproved/natural features rather than community/event space, and within 1,500 feet of all planned high-density urban form.
- In the context of much comparable redevelopment in the City of Portland, park space is a common denominator among new urban form comparable to that envisioned for the AmberGlen Community Plan.
- Well-planned park space should be thought of as one leg on a three-legged stool as well as proximate commercial/entertainment amenity and key employment amenity.
- As evidenced by the pricing leadership of the Pearl District, a strong assortment of commercial amenities, such as shops, restaurants, grocery stores, bars, and galleries, are necessary for most high-density
residential to be successful. Proximity to primary employment concentrations and natural amenities are secondary.

- The Pearl is the only neighborhood in the State of Oregon to have large scale success with high-density residential development and most of that success was during the housing boom between 2003 and 2007. Downtown has had some moderate success with a couple projects during the same boom period. The South Waterfront, despite its ample greenspace and Willamette River frontage far superior to other districts of Portland seeing redevelopment comparable to that envisioned for the AmberGlen Community, sold well initially to speculators but has struggled since the housing market cooled.

- The City of Hillsboro should continue to pursue park/open space as a distinct amenity for the AmberGlen Community Plan, however greater emphasis and planning should be put on increasing the strength of the planning area as a commercial/retail and employment center given the failure of far superior park/open space alone to achieve the best redevelopment economics in comparable Portland districts. This may include discussed transportation enhancements that include strengthening of Stucki and the Streets of Tanasbourne as a commercial center for the Hillsboro area.

- Given the estimated 10% to 15% price premium alone from open space, the suggestion that more mid-rise construction be placed closer to the planned central park concept warrants further consideration in our view. Mid-rise would likely benefit more from the park concept as catalyst as it faces lower economic risk than high-rise.