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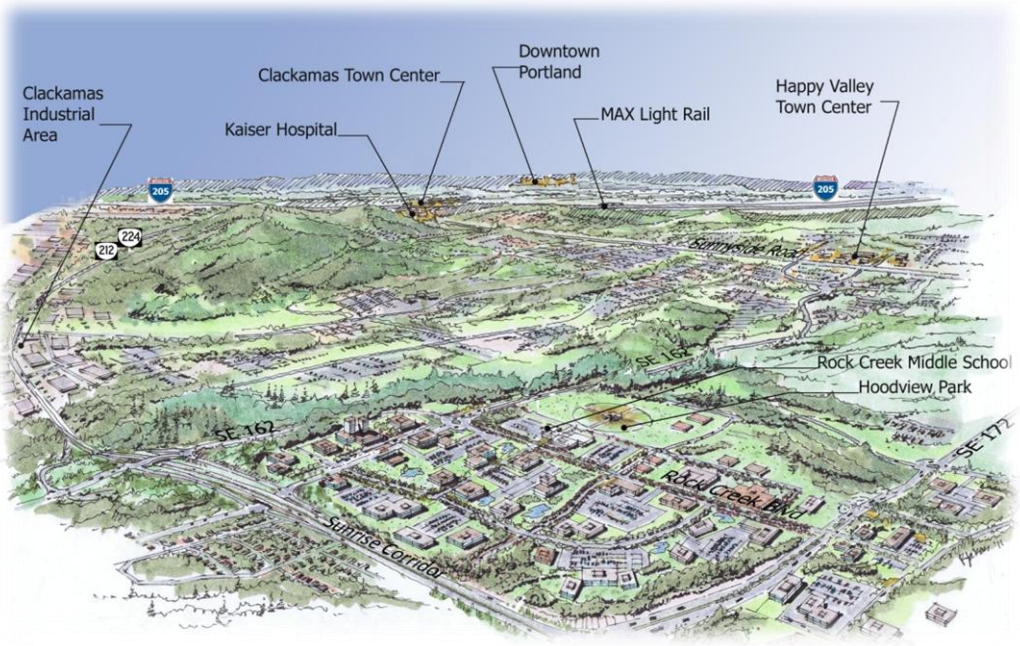
CITY OF HAPPY VALLEY
ECONOMIC OPPORTUNITIES ANALYSIS
TECHNICAL APPENDIX



May 31, 2011

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APPENDIX A – HAPPY VALLEY EOA MEETING NOTES & COMMUNITY OUTREACH

Appendix A-1 Happy Valley Business Advisory Taskforce Meeting #1

Meeting Notes

To: Michael Walter, AICP, City of Happy Valley **Date:** September 8, 2010

From: Todd Chase, AICP, LEED, FCS GROUP

CC: Happy Valley Business Advisory Taskforce (BAT)

RE Happy Valley Economic Opportunities Analysis BAT Meeting No. 1

The first Happy Valley Economic Opportunities Analysis (EOA) BAT meeting was conducted on August 23, 2010 from 7:00 to 8:45 pm at the City of Happy Valley, City Hall. The meeting agenda and list of attendees are attached.

Meeting Handouts

Prior to this meeting, BAT members were provided: the meeting agenda; a draft map depicting vacant employment lands in the Happy Valley Study Area; and annotated excerpts from the Happy Valley Comprehensive Plan pertaining to existing local employment –related land use policies.

Items Discussed/BAT Input

Michael Walter provided an introduction and summarized the overall goals and objectives for the EOA and Goal 9 update. Todd Chase provided an overview of the planning process, and indicated that the BAT would be a policy sounding board and review body that would meet about 3 times during the planning process. BAT representatives would also be invited to testify during the public hearing process once the EOA is slated for adoption.

After discussing and reviewing the existing local employment-related policies and the draft buildable land maps and tabular summaries, the BAT membership identified the following issues.

- Tom Hogue of DLCD is currently developing an expedited EOA approval process, but it is not expected to be finished until after the Happy Valley EOA is completed.
- Happy Valley must make sure it plans on diversifying its existing residential oriented tax base with more commercial and industrial land to become more fiscally sustainable.
- Growth of future employment opportunities in East Happy Valley should take into consideration planned competitive large lot industrial areas in the east Portland metro region, including Damascus, Springwater and Beavercreek.
- The Happy Valley EOA study area should be expanded to take into account the entire Clackamas Industrial Area north of the Clackamas River and east of I-205.

- The fact that Providence is a non-profit means that the city would not receive direct propty tax revenues from investment in the planned Rock Creek Employment Center medical campus.

- Happy Valley needs to continue to attract large employers (such as Providence) to make sure that it has both large and small business establishments to help diversity its local economic base.

- The Sunrise Corridor project must be extended from I-205 to 172nd Avenue to help realize the full economic potential for the Happy Valley and 172nd Avenue Corridor. ODOT must continue to work with Clackamas County, Metro and local jurisdictions to complete this entire segment, especially ROW acquisition and protection in the first phase of the Sunrise Corridor project. Current cost estimates for the entire project from I-205 to US 26 are about $1.6 billion, with $130 million planned on phase 1.

- A TIGER 2 Grant is being pursued to straighten out the Hwy. 212 curves south of the Rock Creek Employment Center. That effort, along with extension of 162nd Avenue across Rock Creek to the north would enable Providence to move forward with development of its properties.

- The Highway 212/82nd Avenue intersection has been deemed one of the most congested transportation nodes in the east metro region, and must be fixed soon or the Clackamas Industrial Area is at risk of losing key employers. The Sunrise Corridor phase 1 will help alleviate this problem.

- To optimize job growth, the future housing base in Happy Valley must include both work force housing and executive housing in locations that are convenient to planned employment centers.

- Existing local strengths in Happy Valley include its schools, parks, public safety, single family housing, and low property tax rates.

- Roadway access/capacity deficiencies and lack of workforce housing are considered to be major local deficiencies.

- Existing planned development opportunities in Happy Valley include the Providence Rock Creek Medical Campus (70 acres); Eagle Landing Commercial Center (70 acres); community shopping center at 172nd/Sunnyside Road (30 acres); and mixed-use development near the existing Happy Valley Town Center.

Next Steps

The consultant team will work on revising the employment land supply analysis and completing the market trends analysis (demand) and will share results at the next BAT meeting to be schedule in early November.

Attachment A
Happy Valley BAT Meeting #1 Attendees

Name	Affiliation
Michael Walter	City of Happy Valley
Todd Chase	FCS GROUP (EOA consultant team)
Justin Healy	Real Urban Geographics (EOA consultant team)
Wendy Burns	Burns & Olsen Realtors (local business rep.)
Ted Hartzell	Local Resident – Planning Commissioner
Lydia Hamann	Happy Valley Business Alliance President/West Coast Bank
Renate Mengleburg	Clackamas County staff and Economic Development Commission rep.
Glenda Fossum-Smith	Providence
Matt Grady	Gramor, Commercial Developer
Terry Emmert	Emmert International (local property owner and business rep.)
Rob Klever	Local Resident/former Happy Valley Planning Commissioner

FCS GROUP

City of Happy Valley

Happy Valley Economic Opportunities Analysis
Business Advisory Taskforce (BAT)
Meeting Agenda

Date and Time: Monday, August 23, 2010, 7:00 p.m.

Subject: EOA Kick-off Meeting

7:00 pm **Welcome and Introductions**

- Introductions
- Meeting Purpose and Overview

Project Background, Overview and Update

- Project Purpose and Goals
- Planning and Process Overview

Background and Existing Conditions

- Existing Comp. Plan Policies
- Existing Commercial & Industrial Buildable Lands
- Future Development Opportunities

Group Discussion

- EOA Analysis Input

Summary and Next Steps

9:00 pm **Meeting Close**

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Appendix A-2 Happy Valley EOA Business Advisory Taskforce Meeting #2

Meeting Notes

To: Michael Walter, AICP, City of Happy Valley **Date:** December 15, 2010

From: Todd Chase, AICP, LEED, FCS GROUP

CC: Happy Valley Business Advisory Taskforce (BAT)

RE Happy Valley Economic Opportunities Analysis BAT Meeting No. 2

The second Happy Valley Economic Opportunities Analysis (EOA) BAT meeting was conducted on December 14, 2010 from 7:00 to 8:50 pm at the City of Happy Valley, City Hall. The meeting agenda and list of attendees are attached.

Meeting Handouts

Prior to this meeting, BAT members were provided: the meeting agenda; a summary of prior meeting minutes; and a draft *Powerpoint* presentation summarizing the demand trends.

Items Discussed/BAT Input

Michael Walter provided an introduction and thanked all participants for attending. Todd provided an overview of the EOA planning process, and indicated that the BAT may be asked to attend one additional meeting in early February. BAT representatives would also be invited to testify during the public hearing process once the EOA is slated for adoption.

Todd updated the BAT on the work progress made since the last meeting. Todd provided revised Buildable Land Maps, with the area of special interest extended south to the Clackamas River. Next, Todd presented the preliminary demand trends analysis using the presentation provided. After discussing and reviewing the existing local employment-related policies and the draft buildable land maps and tabular summaries, the BAT membership identified the following issues.

- BAT members noted that the Metro and state of Oregon long-range employment forecasts make a general assumption that adequate public infrastructure is provided to support the job forecasts. This requires the Sunrise Corridor to be extended at least to 172nd Avenue, and other major projects, such as the Rock Creek Bridge to be built.

- The BAT requested a sample listing of the firms that make up the exiting Happy Valley employment clusters. Todd recommended that the term "Leisure & Hospitality" be changed to "Lodging & Restaurants."

- The BAT recommended the following target clusters for Happy Valley: Health Care and Bio Tech; Advanced Manufacturing; and Professional Business Services. It was noted that recent and planned investments by Clackamas Community College and OIT support these clusters.

- It was mentioned that Kaiser Hospital currently has a research lab near the Portland Airport, and that it is the type of business and land use that should be targeted for Happy Valley.

- BAT members indicated that Employment and Industrial zoning should be kept flexible as to not make the mistakes like in Oregon City where overly restrictive Campus Industrial zoning and relatively poor location (and other factors) led to no activity occurring with respect to job growth or business investment for several years.

- It was noted that the preliminary Floor Area Ratio (FAR) assumption used in the analysis is a bit higher than what has been built to date in Happy Valley, but generally consistent with Metro's current Urban Growth Report assumptions. It was agreed to keep these relatively optimistic assumptions, for all but general industrial buildings, which should assume an FAR of 0.25.

- Todd noted that the preliminary findings generally indicate that there is an ample supply of industrial and employment zoned land in Happy Valley to meet 20-year needs. However, the commercial land supply looks a bit tight. Todd recommended that the city explore ways to encourage additional mixed-use employment land in areas east of the Happy Valley Town Center, and along E or I zones with relatively steep slopes. This approach would enable the city to address future commercial and service demand that may not be met with the current more limited commercial vacant land supply. Another advantage of this approach is that it could result in more development flexibility for future developers and property owners, and allow steeper land areas to be more fully utilized within the city limits. The BAT expressed agreement with this approach.

- BAT members noted that there are a few key tax lots shown as being vacant and buildable in the vacant lands buildable land inventory (BLI) for the special planning area that are unbuildable due to floodplains, slopes and other limitations. Two large tax lots, including the KEX Tower Site near I-205 and the Quarry Site near the Clackamas River are deemed by the BAT to be unbuildable, and should be re-evaluated and/or removed from the BLI.

- The BAT also recommended that the BLI analysis be based on a 10% or greater slope for Industrial Zones (versus the 25% slope), and that Metro Title 3 and Title 13 constraints may also be considered to net out unbuildable lands.

- With regard to potential economic development and implementation policies, the BAT expressed support for raising public and elected official awareness of the potential employment benefits that would be created if the Sunrise Corridor was extended. This would help leverage non-local grants from ODOT and USDOT and other agencies.

- There was support by some BAT members for variable SDCs that provide incentive (lower fees) for strategic development types, such as new business investment for the strategic business clusters, and mixed-use development with proximity to transit service.

Next Steps

The consultant team will work on revising the employment land supply and demand analysis and completing the draft Economic Opportunities Analysis (EOA) by early January. The next BAT meeting will be scheduled in early February.

Attachment A
Happy Valley BAT Meeting #2 Agenda

Happy Valley Economic Opportunities Analysis
Business Advisory Taskforce (BAT)
Meeting Agenda

Date and Time: Tuesday, December 14, 2010, 7:00 p.m.

Subject: EOA BAT Meeting #2

7:00 pm **Welcome and Introductions**
- Introductions
- Meeting Purpose and Overview

Preliminary Demand Findings
- Trends
- Land Needs

Draft Buildable Lands Analysis
- Existing Commercial & Industrial Buildable Lands
- Future Development Opportunities

Group Discussion
- EOA Analysis Input

Summary and Next Steps

9:00 pm **Meeting Close**

Attachment B
BAT Meeting #2 Attendees

Name	Affiliation
Michael Walter	City of Happy Valley (city's EOA project manager)
Todd Chase	FCS GROUP (EOA consultant team)
Wilda Parks	North Clackamas County Chamber of Commerce
Wendy Burns	Burns & Olsen Realtors (local business rep.)
Lori DeRemer	Local Resident – Mayor Elect
Renate Mengleburg	Clackamas County staff and Economic Development Commission rep.
Matt Grady	Gramor, Commercial Developer
Terry Emmert	Emmert International (local property owner and business rep.)
Rob Klever	Local Resident/former Happy Valley Planning Commissioner

Appendix B-3 Happy Valley EOA Business Advisory Taskforce Meeting #3

Meeting Notes

To: Michael Walter, AICP, City of Happy Valley **Date:** March 7, 2011

From: Todd Chase, AICP, LEED, FCS GROUP

CC: Happy Valley Business Advisory Taskforce (BAT)

RE Happy Valley Economic Opportunities Analysis BAT Meeting No. 3

The third Happy Valley Economic Opportunities Analysis (EOA) BAT meeting was conducted on March 7, 2011 from 7:00 to 8:45 pm at the City of Happy Valley, City Hall. The meeting agenda and list of attendees are attached.

Meeting Handouts

Prior to this meeting, BAT members were provided: the meeting agenda; draft Community Economic Development Objectives, and related draft economic vision, policy objectives and land use code strategies. At the meeting, Todd provided a copy of the March 7, 2011 Powerpoint presentation on draft EOA findings.

Items Discussed/BAT Input

Michael Walter initiated self-introductions and thanked BAT members for participating in the EOA and Goal 9 process. Todd Chase summarized the findings from the EOA work tasks.

- Todd indicated that the draft buildable land analysis findings have been revised to take into BAT recommendations to remove the large site that is encumbered by wetlands and cell radio towers near Lawnfield Road; and the revised assumption that includes netting out slopes over 10% for industrial zones, and slopes over 25% for other employment zones.
- Todd reminded the BAT that the low or medium growth forecast are now more likely in the aftermath of the recent recession, now that the Southwest Region of the greater Portland market area has over 2 million square feet of vacant industrial space, and over 1.6 million square feet of office and retail building floor area. Todd also noted that several large employment centers are likely to come on line within the next 3-10 years in the following locations: Wilsonville, Tualatin, Sherwood and Hillsboro. Hence, demand for new "greenfield" industrial sites may trend towards the low to medium growth forecast scenarios.
- Todd said that the expected future employment land demand for Happy Valley is between 200 and 332 acres.
- Todd noted that the city has an adequate vacant land supply to handle expected demand for employment and industrial uses under all growth forecast scenarios. Todd

indicated that the city has a more limited supply of commercial (retail) land, citing only one remaining commercially-zoned parcel of ten acres.

After discussing and reviewing the draft findings and recommended economic development policies, the BAT membership identified the following issues.

- BAT members (Windy and Terry) noted that there has been a surge in recent inquires for industrial buildings or land in Happy Valley now that several businesses are being relocated in advance of the TriMet MAX light rail extension to Milwaukie.
- BAT members supported the identified target clusters including health care (bio-med and services), specialty manufacturing (metals and machines), wholesale trade (logistics support), professional office/business (corporate headquarters) and advanced education, specifically, Clackamas Community College. The BAT expressed interest in the idea of some sort of cross training between CCC and expanding hospitals in the area, creating a pipeline of capable health care professionals all in one place. Todd noted that possible professional business types include transportation logistics operations and corporate headquarters buildings. Todd noted that tourism is another cluster that may be nurtured in Happy Valley.
- The BAT suggested that the city create a database of local visitor destinations and events and their related economic impacts, including the annual Pickathon festival and Eagle Landing Golf Course.
- BAT members requested a potential policy to protect the area near the NW intersection of 172nd and Sunnyside Road for a future community commercial center (and not to allow residential or other non-commercial encroachment on that site).
- The BAT suggested that some land within the Rock Creek Employment Center, which has significant slopes and is near Hood View Park and local schools, be considered for allowing multifamily housing, possibly with a low income element. BAT members indicated that having housing in this area would encourage future workers in the Rock Creek Employment Center to live close to their jobs, cutting down on congestion, greenhouse gasses and improving overall community health. BAT members also noted, that a change in allowable use for 40-60 acres of land area that is otherwise constrained by moderate slopes would enable the city to collect additional fees to help pay for the planned infrastructure capacity needed to serve this area , and thereby make the other industrial developments more feasible.
- The BAT discussed the future of lot 124, the lot to the north of the expected Providence hospital expansion. The BAT favored the idea of assisted living being placed there, another move to capitalize on the increased health care presence in the area as well as provide an establishment which will provide a great deal of employment.
- The BAT discussed the issue of system development charges (SDCs) and the way they would impact the proposed hillside multifamily development. Some BAT members felt that the SDCs should be waived for developments on hillsides to encourage their construction.
- BAT members supported the draft vision and CEDOs proposed in the draft EOA, particularly policies that make Happy Valley a "business friendly" community. Todd suggested the idea of new land use policies or design standards that help streamline and simply the development review and approval process. BAT members liked the idea of having one person assist developers with each step of the approval process.

- Todd noted that this is a good time to consider future design guidelines that help guide future development in the Rock Creek Employment Center so that new buildings along key streets like, 162nd and 172nd set the tone for a high quality image. Terry supported standards that expedited the development approval process, and general requirements for building orientation towards these key streets (with parking in rear) and window glazing along the faces of buildings along 172nd and 162nd to create a uniform corridor.
- BAT members emphasized the importance of building the Sunrise Corridor roadway from I-20 to 162nd or 172nd Avenue. They noted that this project is absolutely essential for business investment in the Rock Creek Employment Center and other areas along Highway 212 to occur.

Next Steps

FCS GROUP will compile a draft final EOA document with recommended land use policy and code amendments in March. The city will circulate the draft product to the BAT and initiate Happy Valley Planning Commission and City Council adoption hearings in May or June. The BAT members are encouraged to participate in the EOA hearing proceedings.

Attachment A
Happy Valley BAT Meeting #3 Attendees

Name	Affiliation
Michael Walter	City of Happy Valley
Todd Chase	FCS GROUP (EOA consultant team)
Tim Wood	FCS GROUP (EOA consultant team)
Wendy Burns	Burns & Olsen Realtors (local business rep.)
Ted Hartzell	Local Resident – Planning Commissioner
Lydia Hamann	Happy Valley Business Alliance President/West Coast Bank
Renate Mengleburg	Clackamas County Economic Development Commission rep.
Glenda Fossum-Smith	Providence Health Systems
Matt Grady	Gramor, Commercial Developer
Terry Emmert	Emmert International (local property owner and business rep.)
Wilda Parks	North Clackamas Chamber of Commerce
Rob Klever	Local Resident/former Happy Valley Planning Commissioner

APPENDIX B – EMPLOYMENT TRENDS ANALYSIS AND ASSUMPTIONS

Economic & Employment Trends

FCS GROUP conducted an economic overview and real estate market analysis of office, commercial retail, industrial, and public government space development for the Happy Valley market area. This analysis is focused on the expected level of demand for new commercial, industrial, and public development and related gross buildable land needs over the next 20 years (2011-2031).

The U.S. and Oregon economy are currently mired in the aftermath of a national economic recession that began in December 2007. The current economic slowdown is now the longest on record since the Great Depression, but some economic expansion is beginning to occur. According to the U.S. Bureau of Economic Analysis, real Gross Domestic Product (GDP is the measure of value of all goods and services in the U.S.) increased in 2010 at an annual rate of 3.7 percent during the first quarter, 1.7% during the second quarter, and 2.5 percent during the third quarter of 2010.

Consumers are still very cautious as unemployment rates remain higher in Oregon than the nation, and home foreclosures continue to mount. Oregon posted a year-over-year overall job gain of 16,200 jobs between November 2009 and November 2010. At the same time, the state's unemployment rate remained at 10.6 percent in November 2010, compared to 10.7 percent in November 2009. It should be noted that the Oregon also is experiencing a high level of "under-employment" which is not reflected in these data trends.

The U.S. and Oregon economy are now poised for a slow economic recovery. The July 2010 survey of the National Association of Business Economists reported expectations of slow growth in GDP during the second half of 2010 in the U.S. as industry demand, profit margins, employment, capital spending, and credit conditions improve.

Population levels continue to increase in both Oregon and Happy Valley due to population migration patterns, increases in immigrant population levels, and natural population increases. As indicated in **Table 1**, according to the Portland State University Population Research Center, the population in Happy Valley increased to 11,865 residents in 2010 (July 1), up from 4,519 residents in 2000. The average annual growth rate (AAGR) for population in Happy Valley was far higher than the county, state or nation with 10.1% average annual growth between 2000 and 2010.

Table 1. Population Trends, 2000 to 2010

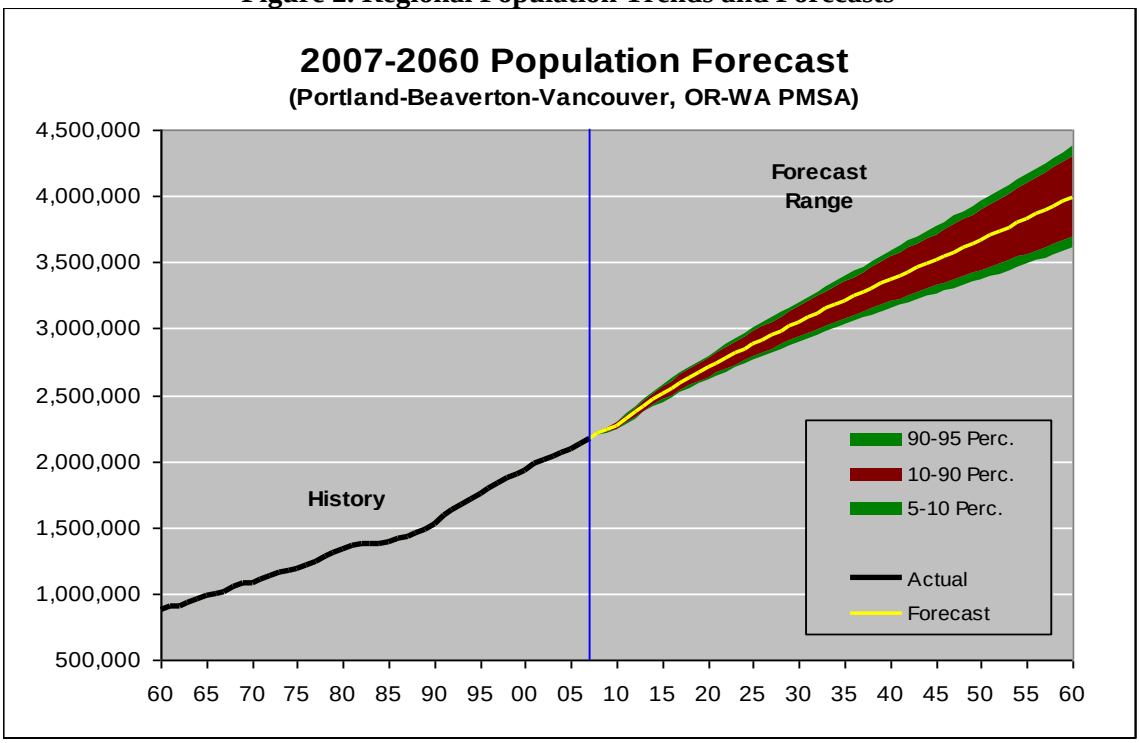
	2000	2010	Annual % Change 2000-2010
Happy Valley	**4,519**	**11,865**	**10.1%**
Clackamas County	340,000	381,775	1.2%
Oregon	3,421,399	3,823,465	1.3%
USA	282,171,957	310,924,000	1.0%

Source: Portland State University, Population Research Center; and US Census.

National population migration patterns, increases in immigrant population levels, and natural population increases are expected to result in urban population growth rates for the greater Portland Region that exceed national averages. As indicated in **Figure 2**, the population of the Portland-Beaverton-Vancouver PMSA increased from 1,928,000 to 2,185,000 between 2000 and 2008 (July 1 estimate). According to Metro, the regional government, PMSA population is forecasted to increase

over the foreseeable future. The PMSA is forecasted to add between 346,500 and 467,300 people over the next 10 years.

Figure 2. Regional Population Trends and Forecasts

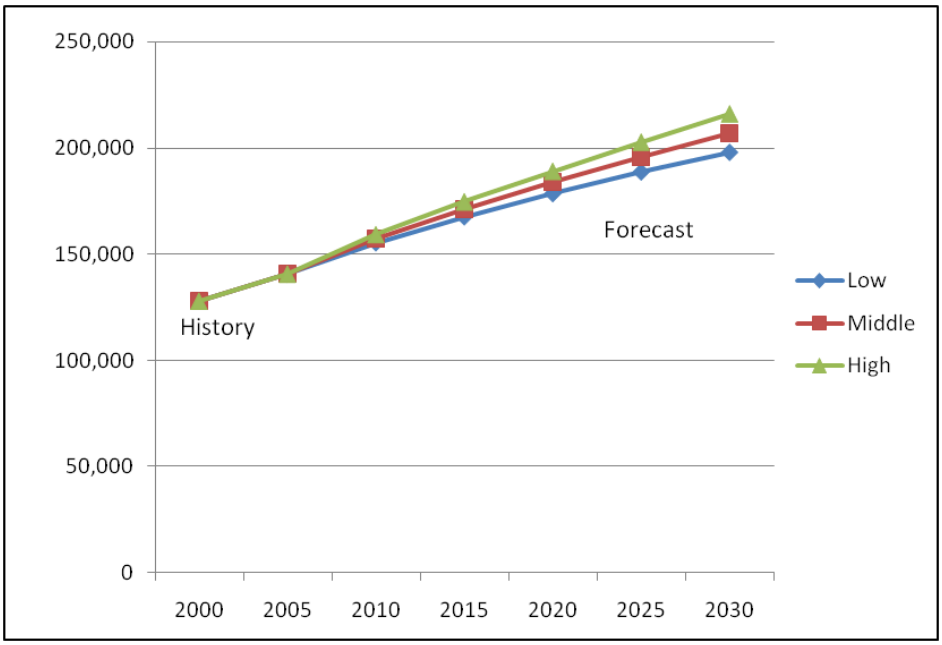


Source: Metro, 2009 Urban Growth Report.

Within Clackamas County, the historic 2000-2010 population growth rate was 1.2% per year, as the county expanded in population from 340,000 to nearly 382,000 people. According to Metro, Clackamas County had approximately 140,415 households in 2005, and is forecasted to add between 1,500 and 1,900 new households annually over the next 15-20 years, as shown in **Figure 3**.

Increasing population levels within the greater Portland Region will also result in an expanding labor force. In 2009, population within the Portland-Vancouver-Beaverton PMSA (seven-county region) expanded by nearly 40,000 residents, while employment declined by over 38,000 jobs, according to HIS Global Insight. The influx of population into the greater Portland Region during a time of economic recession and job layoffs is creating persistently high levels of unemployment for the region.

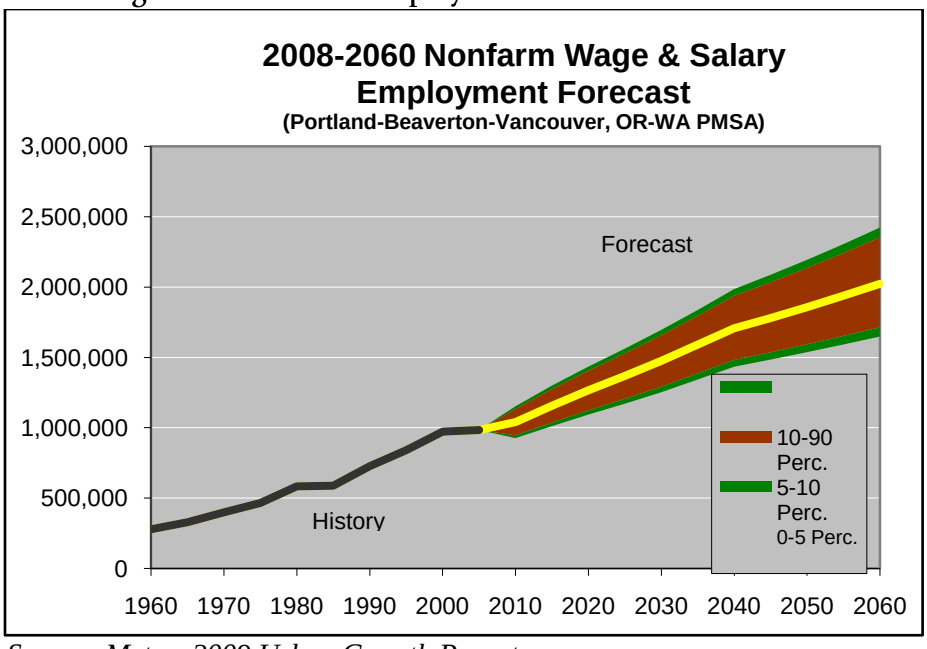
Figure 3. Clackamas County Housing Trends and Forecasts



Source: derived from Metro forecasts by FCS GROUP.

Over the long-term, Metro expects employment within the seven-county PMSA region to increase by up to 670,000 new jobs by 2035, at the upper-end of the range shown in **Figure 4**. The urban portion of the Metro Region (which includes Happy Valley) is forecasted by Metro to capture about 75 percent of the job growth that occurs within the PMSA Region.

Figure 4. Nonfarm Employment Trends and Forecasts



Source: Metro, 2009 Urban Growth Report.

Metro (the regional government) has prepared forecasts for households and employment for all local jurisdictions in the Metro Urban Growth Planning Area. The most recently adopted Metro growth forecasts are referred to as the Metroscope Generation 2.3 model, and include a forecast period from 2005 to 2030. FCS GROUP extrapolated the Metro forecasts to year 2035 using Metro's forecasted growth rate from the 2005-2030. While Metro is currently in the process of preparing updated growth forecasts for the region, the Metroscope Generation 2.3 forecasts are being used for this EOA since they are the only set of officially adopted forecasts at this time. As indicated in **Table 2**, the 2005 to 2035 forecasts anticipate that Happy Valley will add approximately 11,854 households and 11,298 jobs over the 25-year period.

As noted in **Table 2**, the Metro job growth forecasts reflect the fact that Happy Valley is relatively a "bedroom community" with a low ratio of 0.5 jobs per household, which is well below the tri-county Metro regional average of 1.5 jobs per household. This is no surprise given Happy Valley's concentration of limited residential land base that was not expanded until recently to include the East Happy Valley area west of Damascus.

Table 2. Metro Growth Forecasts for Households and Employment, 2005 to 2035

	Households			Proj. Change 2005-2035	Proj. Avg. Annual Change (%)
	2005	2030	2035		
Happy Valley	4,746	14,665	16,600	11,854	4.2%
Clackamas County	140,415	241,821	269,594	129,179	2.2%
Multnomah County	288,926	372,913	392,439	103,513	1.0%
Washington County	189,925	272,998	293,545	103,620	1.5%
Total 3 County Region	***619,266***	***887,732***	***955,578***	**336,312**	***1.5%***

	Employment			Proj. Change 2005-2035	Proj. Avg. Annual Change (%)
	2005	2030	2035		
Happy Valley	2,471	11,886	13,769	11,298	5.9%
Clackamas County	145,581	251,286	280,273	134,692	2.2%
Multnomah County	493,671	705,721	758,005	264,334	1.4%
Washington County	269,660	450,970	499,820	230,160	2.1%
Total 3 County Region	***908,912***	***1,407,977***	***1,538,098***	**629,186**	***1.8%***

	Jobs Per Household Ratio			Proj. Happy Valley Capture of Region HHs	Proj. Happy Valley Capture of Region Jobs
	2005	2030	2035		
Happy Valley	0.5	0.8	0.8	**3.5%**	**1.8%**
Clackamas County	1.0	1.0	1.0		
Multnomah County	1.7	1.9	1.9		
Washington County	1.4	1.7	1.7		
Total 3 County Region	***1.5***	***1.6***	***1.6***		

Source: Metro adopted housing and employment growth forecasts, 2007; Metroscope Gen. 2.3; extrapolated to 2035 by FCS GROUP.

The demand for office development is usually driven by the amount of existing businesses and employment growth in an area, and the ability of the market area to capture and attract professional service-oriented businesses. New commercial development (retail and office) must carefully consider the existing strength of the trade area, which is often measured by vacant and lease rates. More detailed market studies also consider factors, such as the age and market orientation of the existing inventory, traffic counts, and institutional investment interest in an area.

With regard to the office market, Happy Valley is located in what real estate brokers and investors consider to be the Southeast market area of the Portland Region, according to COSTAR. In addition to Milwaukie/Clackamas, the Southeast market area includes Mall 205, Oregon City and the SE Close-in areas.

Current office market statistics (end of the third quarter 2010) indicate that the Southeast area had a total inventory of 7.1 million square feet of rentable building area, a 8.2 percent average vacancy rate, and average lease rates of $17.46. The Southeast market area experienced a net decline in absorption during the first three quarters of 2010 of negative 47,000 square feet. However, the vacancy rates and average lease rates in the Southeast region are relatively low compared to the rest of the region, as indicated in **Table 3.**

Table 3. Total Office Market Statistics, Portland Region, 3rd Quarter 2010

	Existing Inventory	Vacant Inventory	1st Half Net Absorption*	Vacancy %	Quoted Rates
CBD	25,273,000	2,599,000	206,000	10.3%	$ 21.35
Clark County	10,626,000	1,426,000	105,000	13.4%	$ 19.09
I-5 Corridor	9,403,000	1,853,000	(251,000)	19.7%	$ 22.12
Lloyd District	4,991,000	262,000	50,000	5.2%	$ 18.01
Northeast	8,540,000	547,000	290,000	6.4%	$ 17.31
Northwest	3,811,000	220,000	(17,000)	5.8%	$ 18.41
Southeast	**7,116,000**	**582,000**	**(47,000)**	**8.2%**	**$ 17.46**
Southwest	11,143,000	1,790,000	(80,000)	16.1%	$ 18.23
Westside	10,076,000	1,361,000	(27,000)	13.5%	$ 16.74
Total	**90,979,000**	**10,640,000**	**229,000**	**11.7%**	**$ 19.48**

Source: COSTAR; and Capacity Commercial Group.

The office absorption in the Southeast market area increased on average by 19,400 SF per quarter between 2005 and 2010. As indicated in **Table 4**, the average vacancy rate trended downwards between 2006 and 2008, but then increased afterwards to 8.2 percent as of the third quarter of 2010.

Table 4. Quarterly Office Market Statistics, Southeast Market Area, 2005-2010

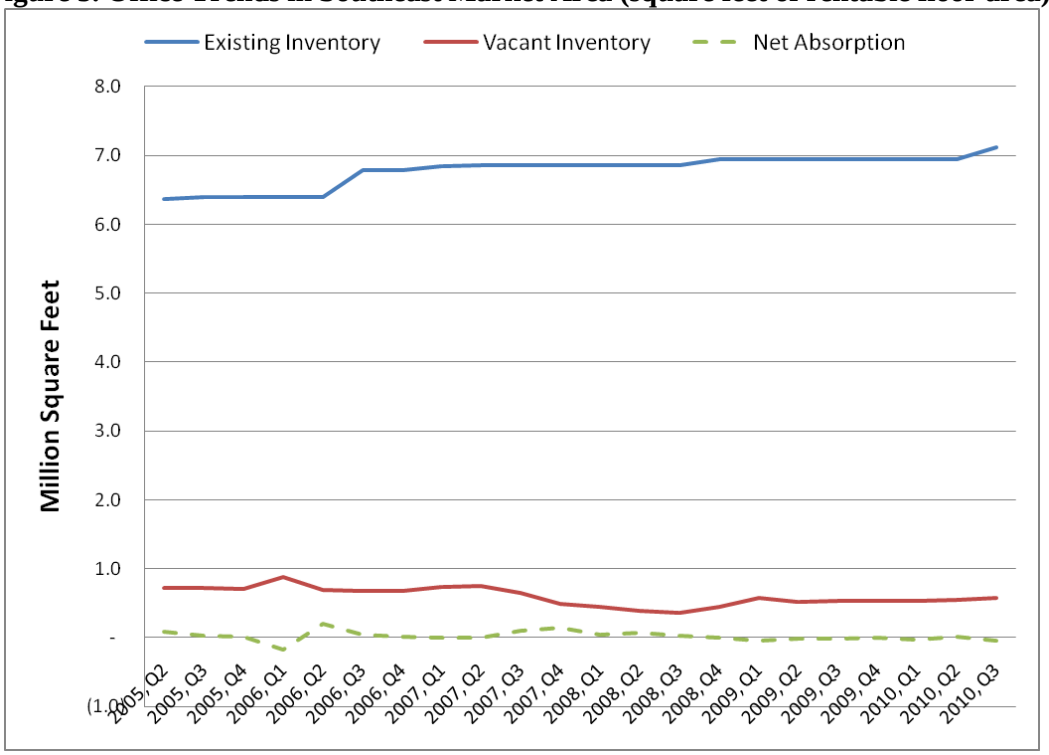
	Existing Inventory	Vacant Inventory	Net Absorption (year to date)	Vacancy %	Quoted Rates*
2005, Q2	6,364,176	713,529	83,464	11.2%	$ 16.32
2005, Q3	6,397,444	722,371	24,426	11.3%	$ 16.42
2005, Q4	6,397,444	709,064	13,307	11.1%	$ 16.09
2006, Q1	6,402,089	884,889	(171,190)	13.8%	$ 16.99
2006, Q2	6,402,089	687,190	197,709	10.7%	$ 16.71
2006, Q3	6,793,000	681,000	43,817	10.0%	$ 17.47
2006, Q4	6,793,000	671,000	9,633	9.9%	$ 17.47
2007, Q1	6,844,000	730,000	(7,202)	10.7%	$ 17.74
2007, Q2	6,857,000	745,000	(1,884)	10.9%	$ 16.52
2007, Q3	6,857,000	645,000	99,781	9.4%	$ 16.80
2007, Q4	6,857,000	496,000	149,013	7.2%	$ 17.36
2008, Q1	6,857,000	450,000	46,213	6.6%	$ 18.48
2008, Q2	6,861,000	384,000	69,814	5.6%	$ 17.60
2008, Q3	6,861,000	361,290	22,390	5.3%	$ 18.09
2008, Q4	6,945,000	451,000	(5,699)	6.5%	$ 17.81
2009, Q1	6,943,000	494,565	(45,246)	7.1%	$ 17.71
2009, Q2	6,943,000	512,000	(17,143)	7.4%	$ 17.19
2009, Q3	6,943,000	533,000	(21,528)	7.7%	$ 17.34
2009, Q4	6,943,000	529,000	4,387	7.6%	$ 15.60
2010, Q1	6,943,000	536,882	(37,346)	7.7%	$ 17.91
2010, Q2	6,943,000	554,000	17,120	8.0%	$ 17.62
2010, Q3	7,116,000	582,000	(46,672)	8.2%	$ 17.46
Avg.	**6,784,647**	**594,217**	**19,417**	**8.8%**	**$ 17.21**

** Not adjusted for inflation.*

Source: COSTAR and Capacity Commercial Group; compiled by FCS GROUP.

The Southeast market area has experienced average annual absorption of over 131,000 square feet per year between 2005 and 2010. As employment declined after late 2008 and, the vacant office inventory increased to 582,000 square feet, as reflected in **Figure 5**.

Figure 5. Office Trends in Southeast Market Area (square feet of rentable floor area)



Source: COSTAR, and FCS GROUP.

According to CoStar, the Southeast market has remained a bit stronger for retail than for office demand. As indicated in **Table 5**, the overall average vacant rate for retail space in the Southeast market was 5.7 percent at the end of the 3rd quarter in 2010. However, a large amount of vacant space (over 1.1 million square feet) was listed at this time.

Table 5. Retail Market Development Leasing Statistics, Southeast Market Area, 3rd Quarter 2010

Retail Market Statistics								
	Existing Inventory		Vacancy		YTD Net	YTD	Under Const	Quoted
Market Area	# Buildings	Total RBA	Total SF	Vac %	Absorbtion	Deliveries	SF	Rates
Southeast	1,961	19,783,892	1,120,295	5.7%	(7,372)	25,600	28,376	$15.83
Clackamas/Milwaukie	544	4,163,737	358,247	8.6%	28,120	25,600	14,750	$14.73
Mall 205	518	2,688,481	66,040	2.5%	26,640	-	13,626	$14.16
Oregon City	75	642,926	35,684	5.6%	(5,043)	-	-	$10.07
SE Close In	487	3,150,478	67,116	2.1%	(7,529)	-	-	$15.61

Source: CoStar Office Report 3rd Quarter 2010; Capacity Commercial Group.

Industrial market activity is also weak within the Southeast market area. As indicated in Table6, the overall vacancy rate was 7.0 percent in the 3rd quarter of 2010 with over 2.0 million square feet of vacant industrial space on the market, as shown in **Table 6.**

Table 6. Industrial Market Development Leasing Statistics, Southeast Market Area, 3rd Quarter 2010

Flex Building Market Statistics

	Existing Inventory		Vacancy		YTD Net	YTD	Under Const	Quoted
Market Area	# Buildings	Total RBA	Total SF	Vac %	Absorbtion	Deliveries	SF	Rates
Southeast	113	1,206,403	132,729	11.0%	(64,749)	-	-	$11.50
Clackamas/Milwaukie	42	689,717	57,731	8.4%	23,665	-	-	$9.91
Mall 205	7	31,764	-	0.0%	-	-	-	$0.00
Oregon City	4	36,143	5,752	15.9%	(1,438)	-	-	$0.00
SE Close In	60	448,779	69,246	15.4%	(39,646)	-	-	$13.12
Total	113	1,206,403	132,729	11.0%	(64,749)	-	-	-

Warehouse Building Market Statistics

	Existing Inventory		Vacancy		YTD Net	YTD	Under Const	Quoted
Market Area	# Buildings	Total RBA	Total SF	Vac %	Absorbtion	Deliveries	SF	Rates
Southeast	1,073	28,466,008	1,952,066	6.9%	(219,802)	7,700	-	$4.82
Clackamas/Milwaukie	504	20,529,325	1,621,869	7.9%	(72,765)	7,700	-	$4.55
Mall 205	47	312,809	5,400	1.7%	500	-	-	$9.48
Oregon City	40	874,306	62,355	7.1%	(24,637)	-	-	$7.09
SE Close In	482	6,749,568	262,442	3.9%	(122,900)	-	-	$5.45
Total	1,073	28,466,008	1,952,066	6.9%	(219,802)	7,700	-	-

Total Industrial Market Statistics

	Existing Inventory		Vacancy		YTD Net	YTD	Under Const
Market Area	# Buildings	Total RBA	Total SF	Vac %	Absorbtion	Deliveries	SF
Southeast	1,186	29,672,411	2,084,795	7.0%	(284,551)	7,700	-
Clackamas/Milwaukie	546	21,219,042	1,679,600	7.9%	(49,100)	7,700	-
Mall 205	54	344,573	5,400	1.6%	500	-	-
Oregon City	44	910,449	68,107	7.5%	(26,075)	-	-
SE Close In	542	7,198,347	331,688	4.6%	(162,546)	-	-
Total	1,186	29,672,411	2,084,795	7.0%	(284,551)	7,700	-

Source: CoStar Office Report 3rd Quarter 2010; Capacity Commercial Group.

Opportunities and Challenges

FCS GROUP conducted interviews with local brokers and incorporated current economic development reports from Clackamas County and Oregon Business. The results, when coupled with input from the BAT reflect local economic development opportunities and challenges.

Opportunities

- The recently developed Happy Valley Town Center (built in 2008 by Gramor Development) added 170,900 square feet of retail space to the local inventory, and was only 6.4 percent vacant as of June 2009. This recent retail addition is on the high-end of the market with quoted lease rates of $30 per square foot per year (excluding utilities and common area charges). Its success provides evidence of the strength of the buying power within Happy Valley.

- The other major retail center in the Happy Valley market area includes the 1.2 millions square foot Clackamas Town Center, which opened in 1981. The mall operator/owner General Growth Properties recently expanded the mall by adding 250,000 square feet to accommodate 40 new stores/restaurants primarily in a lifestyle format. In addition, a new

75,000 square foot 20-screeen multiplex theatre was added along with exterior building, landscaping, and traffic /pedestrian circulation improvements.

- Additional planned developments in Happy Valley include a new medical office building within the Happy Valley Town Center area, and planned lifestyle housing, office and retail development as part of the Eagle's Landing Planned Unit Development near I-205.

- The city has also been working with Clackamas County on plans for a new Rock Creek Employment Center located between 152nd and 172nd Avenues north of Highway 212. This area has been subject to recent city/county investment in improvements to 172nd Avenue, and extension of water and sewer service to the site. The Rock Creek Employment Center includes approximately 176 acres of buildable land area, before deducting land for recent parks and school developments. Providence is also planning its newest hospital campus within the Rock Creek Employment Center in the near future.

- The City of Happy Valley area is already home to Oregon's largest health care industry and related business sectors. Some of the largest county employers are located here, including Kaiser Sunnyside Medical Center, Providence Clackamas Medical Plaza, Providence Medical Office Building, and over two dozen medical related businesses within a two-mile radius.[1]

- In addition to the strong health care business cluster, Happy Valley is adjacent to well established industrial employers, including Oregon Steel Works, Safeway Distribution Center, and Fred Meyer Distribution Center— and the Clackamas Industrial Area.

- The recent opening of the TriMet Greenline Light Rail Transit with stations east of I-205 provides improved fixed transit access for Happy Valley commuters to/from the Portland Airport, Clackamas Town Center and downtown Portland.

- Happy Valley has relatively good proximity to Portland International Airport (11 miles) and is 13 miles from downtown Portland.

- Happy Valley provides streamlined planning/building permitting for expediting development approvals.

- Happy Valley provides excellent fire and police protection services.

- Happy Valley has a relatively low property tax rate in comparison with most cities within the greater Portland Region, which may be attractive to major businesses looking to locate or expand.

- Happy Valley residents have a relatively high income levels ($100,510 median household income in 2009 dollars) and large average household size.

- Public schools in Happy Valley are excellent and there is also convenient access to local colleges and universities, including Clackamas Community College and the Oregon Institute of Technology.

[1] Analysis provided by Clackamas County Business & Economic Development.

- There are large "shovel ready" commercial and industrial development parcels that are ready for new development (including Rock Creek Employment Center and the Eagles Landing PUD).

- The city and county have adopted a rural Strategic Investment Zone designation for the Rock Creek Employment Center, which allows limited property tax abatement for capital investments over $25 million.

Challenges

- Recent office leasing market statistics indicate that office vacancy rates in the Metro region have been increasing since 2008 as many businesses have shed jobs and scaled back on required space needs. Negative absorption levels have been occurring during the first three quarters of 2010 for office, retail and industrial activity in the Southeast region—which may reflect a soft market for new employment development over the near term (1-3 years).

- Large state highway transportation roadway projects, including the Sunrise Corridor are in the works but are not being planned for a near-term extension to 172nd Avenue. Until this major arterial is constructed traffic congestion is expected to hamper new development within Happy Valley and the Clackamas Industrial Area.

- Other major local roadways, including the 162nd Avenue extension between Sunnyside Road and Highway 212 require major bridge and structural work over Rock Creek. Unfunded roadways could create unknown cost burdens to potential businesses and developers considering Happy Valley as a location, and dissuade investment activity.

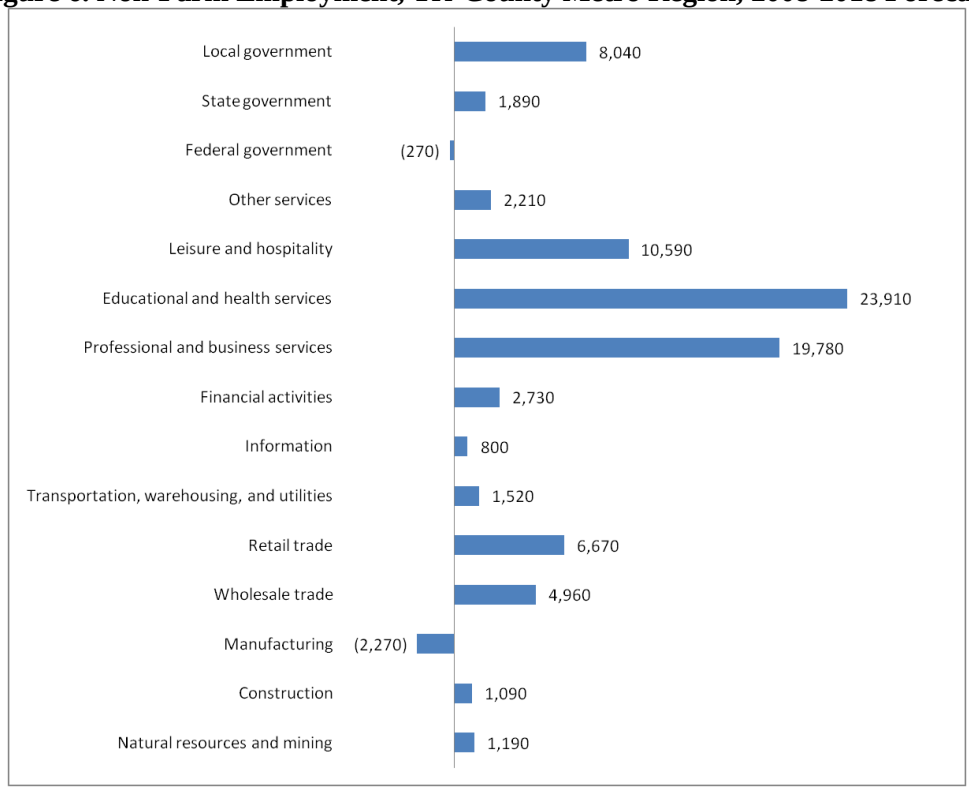
- A lack of sewer service north of Hagan Road along 172nd Avenue would likely limit urbanization of planned employment and mixed-use development in northeast Happy Valley for the foreseeable future.

Target Industry Analysis

To estimate future development potential for Happy Valley employment, FCS GROUP evaluated the 10-year employment growth forecasts prepared by the Oregon Employment Department for the Metro Tri-County region, and Metro growth forecasts for Happy Valley. As indicated in **Figure 6,** the 10-year job growth forecasts for the Metro Tri-County Region portend a positive trend towards job growth for all industry sectors, except federal government and the manufacturing sector. The sectors that are expected to grow the fastest in the Tri-County Metro Region include: educational and health services; professional and business services; leisure and hospitality; local government; retail; and wholesale trade.

As indicated in **Table 7,** the 20-year job growth forecasts for Happy Valley indicate a more positive trend towards job growth for all industry sectors. According to Metro (and FCS GROUP interpretation of Metro data), the general sectors that are expected to grow the fastest in Happy Valley over the 2005-2035 time period includes: services (+7,808 jobs); retail (+629 jobs), industrial (+2,343 jobs), and government (+518 jobs).

Figure 6. Non-Farm Employment, Tri-County Metro Region, 2008-2018 Forecast



Source: Oregon Employment Department includes Multnomah, Washington and Clackamas Counties.

The job growth projections indicate that Happy Valley should expect to experience significant new development opportunities over the next 20-years. A range in employment forecasts is provided to take into account current weak market conditions and national economic expectations that expect lower-rates of job growth over the next several years.

Table 7. Happy Valley Long-Range Employment Forecast, 2005 to 2035

			Change:2005-2035	
Sector	**2005**	**Proj. 2035**	**Jobs**	**Percent**
Retail Trades	447	1,076	629	141%
Services	851	8,659	7,808	918%
Industrial/Other	1,173	4,034	2,861	244%
Industrial	*481*	*2,824*	*2,343*	*487%*
*Government/Institutional**	*692*	*1,210*	*518*	*75%*
Total	**2,471**	**13,769**	**11,298**	**457%**

Source: Estimates and forecasts are based on Metro adopted housing and employment growth forecasts, 2007; Metroscope Gen. 2.3; extrapolated to 2035 by FCS GROUP; assumes allocation of "Industrial/other" jobs based upon Oregon Employment Dept. estimates for Happy Valley in 2008: 41% industrial, and 59% government; future 2035 estimated allocation is based on 2018 Oregon Emp. Dept. forecast for Clackamas County: 70% (industrial) and 30% (government). Compiled by FCS GROUP.

* *Government/Institutional job growth reflects public workers expected to be added within Happy Valley, including city offices and schools. Happy Valley has added two new schools since 2005, which likely will account for much of the projected job growth after 2005.*

FCS GROUP performed a sensitivity analysis of Metro's long-range employment forecasts for Happy Valley by varying the job forecasts by +/- 25%, to provide a low, medium and high range of job growth potential. Happy Valley is expected to add between 5,908 and 9,847 new jobs over the next 20 years, as indicated in **Table 8**.

Table 8. Happy Valley 20-Year Employment Forecast, 2011 to 2031

	Low	Medium	High
Retail Trades	315	419	524
Services	3,904	5,205	6,507
Industrial/Other	1,431	1,907	2,384
Government	259	345	432
Total	**5,908**	**7,877**	**9,847**

Note: see supporting analysis in Attachment B-1.

As indicated in **Table 9**, this amount of employment growth translates into approximately 2.6 to 4.3 million square feet of new or renovated building area (floor area). Please refer to **Attachment B-1** for a summary of assumptions used to convert job growth into building and land needs.

Table 9. Forecasted 20-Year Total Building Space Needs in Happy Valley for Employment

	Low	Medium	High
Office	959,000	1,279,000	1,598,000
Gov't/Institutional	84,000	113,000	140,000
Flex/Business Park	496,000	661,000	826,000
General Industrial	415,000	553,000	692,000
Warehouse	96,000	128,000	159,000
Retail	530,000	706,000	884,000
Total	**2,580,000**	**3,440,000**	**4,299,000**

Note: see supporting analysis in Attachment B-1.

Given a general lack of vacant buildings in Happy Valley, a large portion of this demand will need to be met by new development and the utilization of vacant undeveloped tracts of land, within locations such as Eagles Landing and the Rock Creek Employment Center. It is estimated that refill/redevelopment rate and utilization of vacant buildings is expected to accommodate 0% of the industrial space demand, 2% of the retail/service/office demand, and 30% of the government facilities demand.

Table 10 shows the expected level of redevelopment and refill in the Happy Valley USB over the next 20 years. As the existing vacant land supply in Happy Valley gets developed, the level of redevelopment activity is expected to rise. Potential redevelopment levels for Happy Valley are depicted in **Table 10.**

Table 10. Happy Valley Redevelopment and Refill Assumptions (2011 to 2031)

	Low	Medium	High
Office	19,000	26,000	32,000
Gov't/Institutional	25,000	34,000	42,000
Flex/Business Park	-	-	-
General Industrial	-	-	-
Warehouse	-	-	-
Retail	11,000	14,000	18,000
Total	**55,000**	**74,000**	**92,000**

Source: FCS GROUP; derived from Attachment B-1, based primarily on Metro 2009-2035 Urban Growth Report (December 2009 draft) and local assumptions.

After accounting for the levels of redevelopment activity identified in **Table 10**, the amount of vacant land demand in Happy Valley for employment uses over the next 20-years is expected to range from 200 to 333 acres. Preliminary estimates for vacant lands needs in Happy Valley by general building type are provided in **Table 11,** and supporting assumptions are reflected in **Attachment B-1.**

Table 11. Happy Valley Vacant Land Needs by General Land Use Zoning Classification (2011 to 2031) - (gross buildable acres)

Land Use Classification	Low	Medium	High
Commercial	55	73	91
Employment & Mixed Use	53	71	89
Industrial/Government/Other	92	122	152
Total	**200**	**266**	**333**

Source: FCS GROUP; derived from Attachment B-1, based primarily on Metro 2009-2035 Urban Growth Report (December 2009 draft) and local assumptions.

The actual amount and timing of new development will vary from year to year. The wide range in development forecasts reflects current uncertainty regarding the region's ability to retain and attract major employers, the City's desire to stimulate redevelopment near the Town Center, and ability to work with ODOT, Metro and Clackamas County to fund and construct the Sunrise Corridor and 162nd Avenue improvements that can accommodate new commercial and industrial development on vacant lands in East Happy Valley.

Business Clusters Analysis

It is a widely accepted theory among economic development professionals that "business clusters" are the primary force driving local economic currents and business location decisions. Clusters of business activity go well beyond mere concentrations of industry or employment types. They represent unique competitive market advantages with regard to employment, work force, creativity, entrepreneurship, business costs, and supporting natural resources.

The clusters analysis prepared by FCS Group is intended to identify potential employment sectors that are most compatible with local economic policy objectives. The process entailed:

1. Obtaining Employment Security (ES202) wage and salary employment data from the Oregon Employment Department (OED) for the Happy Valley Urban Service Boundary (USB), Washington County, Multnomah County and Clackamas County (tri-county region) for the year 2008.
2. Conducting a location-quotient (LQ) analysis to evaluate business and industrial clusters in the Happy Valley USB relative to the tri-county region.
3. Evaluating business clusters within the Happy Valley UGB with regard to the LQ, projected growth rates, economic size of each cluster, and average wage rates.
4. Classifying each business cluster with regard to one of four classifications, including:

    I. STARS: Businesses with large LQ (propensity to locate in the Happy Valley and higher than average projected growth rate compared to the tri-county region.

II. EMERGING: Businesses with small LQ and high average growth rate (possible pent up demand or competitive market disadvantage relative to other locations).

III. MATURE: Businesses with large LQ but lower than average growth rate.

IV. CHALLENGED: Businesses with small LQ and lower than average growth rate.

The business cluster analysis identifies the business sectors within the Happy Valley by their LQ, size and growth potential. Each sector has been analyzed by their North American Industrial Classification System (NAICS) code. This code is used by the federal government to classify types of businesses for tax accounting and economic research purposes. The data used for the clusters analyses were derived from the OED ES202 wage and salary employment statistics for the year ending in 2008. The size the bubbles in the following charts provide a relative comparison within each jurisdiction of the total direct wages paid to workers within each industry sector.

The clusters analysis classifies the existing business sectors in Happy Valley area into four general categories:

Industry Sectors with Large LQ/High Growth Potential ("Stars")
- Educational Services (private or non-profit)
- Leisure and Hospitality (includes restaurants)
- Retail Trade

Industry Sectors with Small LQ/High Growth Potential ("Emerging")
- Health Care
- Professional and Business Services
- Miscellaneous Services

Industry Sectors with Large LQ/Low Growth Potential ("Mature")
- Construction
- Financial Activities and Services
- Natural Resources
- Transportation & Warehousing

Industry Sectors with Small LQ/Low Growth Potential ("Challenged")
- Manufacturing
- Wholesale Trade
- Information
- Government

In addition to evaluating existing *local* business clusters, the city may also consider the expected *regional* growth in business sectors and emerging clusters. According to the Oregon Employment Department, the job sectors with the highest potential for new growth in the greater Portland metropolitan region include: health care, hotel/motel accommodations & food services, business administration & waste management, professional, scientific & technical service (such as computer

science and engineering), state & local government, wholesale trade, finance & insurance, retail trade, transportation & utilities (includes warehousing, distribution & energy research and private utilities).[2]

While manufacturing of durable goods does not make the list of the top growth sectors, there are certain subsectors within manufacturing that are growing faster than others. The manufacturing sectors with the greatest net new job growth potential in the greater Portland metropolitan region include: computer-related parts manufacturing, transportation equipment, other misc. durable goods (such as solar panels), and misc. non-durable goods (such as apparel research & design). Health related medical devices and biomedical research and organic food and beverage processing are also growing business sectors within the broader economy.

Focused marketing and business recruitment efforts are being made by the State of Oregon and regional economic development stakeholders to attract certain established and emerging business clusters. The business and industry clusters that are currently being targeted by the Oregon Business Development Department, Portland Business Alliance and the Portland Development Commission include advanced manufacturing, clean technology (with sustainability sub-clusters in green building, solar & wind power), active wear/outdoor gear, and software.

Recommended Business Clusters

The city of Happy Valley may target businesses that generally offer above-average wages and provide health care and retirement benefits that support families. According to the U.S. Bureau of Labor Statistics, the occupations that had the fastest growth and highest pay over the past 10 years nationally included: computer systems analysts, registered nurses, computer support specialists, teachers, social workers, college faculty, computer programmers, engineering sciences, police officers, securities and financial services, physicians, advertising, marketing, management analysts, electrical engineers, paralegals, writers/editors, commercial artists, medical and health service managers. It is interesting to note that almost two-thirds of the jobs filled in these fast growing occupations required some level of on-the-job training in addition to high school and a college degree.[3]

In light of these findings, it is recommended that Happy Valley focus on retaining and attracting a mix of existing and emerging business clusters that pay above average wages. This includes a mix of existing **established and emerging clusters**, such as:

- Health Services and Bio-Medical R&D
- Professional and Business services
- Advanced manufacturing (metals, machinery, testing devices, etc.)
- Advanced learning

As indicated in **Table 12,** these recommended business clusters (with the exception of educational services) pay above average wage rates.

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[2] *These emerging business clusters are documented in the regional WIRED (Workforce Innovation and Regional Economic Development, Global Development Strategy, prepared by FCS Group et.al, 2008.*

[3] *These findings are based on findings contained publications provided by JIST Works, including the Occupational Outlook Handbook, 2008-2009; and America's Fastest Growing Jobs by Michael Farr.*

Table 12. Summary of Existing Businesses in Happy Valley USB, 2008

Industry Sector	Total Jobs	% Total	Total Wages	Average Wage
Natural Resources and Mining	4,957	3.4%	$129,900,576	$26,205
Construction	11,669	7.9%	$532,317,382	$45,618
Manufacturing	18,554	12.6%	$975,524,338	$52,578
Wholesale	10,593	7.2%	$587,920,902	$55,501
Retail	17,584	11.9%	$454,895,725	$25,870
Transportation, Warehousing & Utilities	5,729	3.9%	$249,710,736	$43,587
Information	2,105	1.4%	$123,712,537	$58,771
Financial Services	7,604	5.1%	$417,666,331	$54,927
Professional & Business Services	16,252	11.0%	$830,022,629	$51,072
Education	10,701	7.2%	$359,867,768	$33,629
Health Services	16,551	11.2%	$776,493,546	$46,915
Leisure & Hospitality (includes restaurants)	13,754	9.3%	$218,185,045	$15,863
Other Services	6,081	4.1%	$159,022,755	$26,151
Government	5,691	3.8%	$281,643,420	$49,489
Total	147,825	100%	$6,096,883,690	$41,244

Notes: green shading indicates targeted business cluster.
Source: Oregon Employment Department, 2008.

The majority of the targeted businesses that consider expanding or relocating into Happy Valley will consist of small business operations (less than 50 employees) that can locate within existing professional office or industrial buildings, or within new office or flex/industrial buildings that are developed on vacant sites of less than five acres in size.

It is also apparent that large health service campus operations (by Providence) and other large business and high-tech industrial and research operations are considering Happy Valley as a potential location for new campus-style developments. Certain opportunities may emerge as regional businesses expand and desire to remain within the tri-county region. Other opportunities may occur as global and national businesses desire to establish a presence in the Pacific Northwest. In any event, it is likely that Happy Valley could attract 3-4 large professional service, heath care, education, and/or high tech industrial businesses over the next 20 years.

It is recommended that Happy Valley provide a variety of small, medium and large vacant sites that meet the targeted business and industrial requirements. The existing and potential businesses within Happy Valley can generally be grouped into three general land use categories: industrial, commercial and office.

Most small and medium business establishments prefer to lease space in office or commercial buildings, and/or could locate into redevelopment sites in downtown or in selected redevelopment locations (e.g., near planned high capacity transit stations or within the Happy Valley Triangle). No special vacant land requirements are identified for future small or medium businesses. However, the city should pursue more proactive redevelopment strategies to accommodate small and medium sized businesses.

Larger business establishments that are included within the targeted business clusters will likely have minimum site size and infrastructure service requirements. Typical site requirements for the larger targeted business sectors are described in **Table 13.**

Table 13. Typical Site Size Requirements for Targeted Business Types

	Small Users	**Medium Users**	**Large Users**
	Less than 50 jobs per business	*50 to 70 jobs per business*	*70 to 200+ jobs per business*
Health Services and Industrial Health Care Medical/Bio-Tech R&D Advanced Manufacturing	Building tenants in office or flex building locations	4 to 6 acres per user. Prefers industrial or business park settings	6 to 20 acres per user. Prefers industrial or business park settings
Office Prof. & Business Services Financial Services	Building tenants or redevelopment sites near Town Center or within employment areas	1 to 2 acres per user. Prefers employment centers or locations with transit service	2 to 4 acres per user. Prefers business park setting with transit service.
Retail	Not a targeted cluster, but city supports commercial retail/service development as ancillary development in employment/business centers and in mixed-use settings		

Source: assumes site development requirements shown in Appendix F.

Attachment B-1 Employment Density Assumptions

Happy Valley Net New Average Annual Employment Forecast (1 Year Forecast)

	Low	Medium	High
Retail Trades	16	21	26
Services	195	260	325
Industrial/Other	72	95	119
Government	13	17	22
Total	**295**	**394**	**492**

Happy Valley Net New 20-Year Employment Forecast

	Low	Medium	High
Retail Trades	315	419	524
Services	3,904	5,205	6,507
Industrial/Other	1,431	1,907	2,384
Government	259	345	432
Total	**5,908**	**7,877**	**9,847**

Source: Medium forecast consistent with Metroscope 2.3 and related traffic analysis zone forecast assumptions for the Happy Valley area adopted by Metro Council in 2005; medium and high forecasts vary the medium forecast by 25%.

Job Sectors and Building Type Assumptions

Employment Sectors	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	4%	1%	8%	0%	7%	80%	100%
Services	72%	1%	5%	1%	1%	20%	100%
Industrial/Other	8%	0%	50%	40%	2%	0%	100%
Government	43%	37%	5%	0%	0%	15%	100%

Source: Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

Attachment B-1 Employment Density Assumptions (continued)

Building Type to Land Needs Assumptions*

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail
Refill/Redevelopment Rate [1]	2%	30%	0%	0%	0%	2%
Jobs Needing Vacant Land Rate [2]	98%	70%	100%	100%	100%	98%
Building SF Per Job [2]	370	630	550	700	1,100	510
Floor-Area-Ratio [2]	0.40	0.30	0.30	0.25	0.30	0.30
Public Facility Net:Gross Adjustment [3]	1.10	1.10	1.10	1.10	1.10	1.10
Work at Home Adjustment [4]	0.15	0.03	0.05	0.03	0.03	0.03

** assumptions are intended to reflect a long-term average over 20 years, some "ramp up" is expected to attain these density levels.*

1/ Adjusts for building refill & vacancy allowances.

2/ Building density derived from Metro UGR assumptions.

3/ Allowances take into account land dedicated to public/utility easements.

4/ Allowance based on national statistics by US Dept. of Labor, Bureau of of Labor Statistics, Technical information: "Work at Home in 2004".

Source: assumptions are generally consistent with the Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

Projected Happy Valley Net New 20-Year Employment Forecast by Building Type, Low

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	13	3	25	-	22	252	315
Services	2,811	39	195	39	39	781	3,904
Industrial/Other	114	-	715	572	29	-	1,431
Government	111	96	13	-	-	39	259
Total	**3,049**	**138**	**949**	**611**	**90**	**1,071**	**5,908**

Projected Happy Valley Net New 20-Year Employment Forecast by Building Type, Medium

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	17	4	34	-	29	335	419
Services	3,748	52	260	52	52	1,041	5,205
Industrial/Other	153	-	954	763	38	-	1,907
Government	149	128	17	-	-	52	345
Total	**4,066**	**184**	**1,265**	**815**	**120**	**1,428**	**7,877**

Projected Happy Valley Net New 20-Year Employment Forecast by Building Type, High

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	21	5	42	-	37	419	524
Services	4,685	65	325	65	65	1,301	6,507
Industrial/Other	191	-	1,192	954	48	-	2,384
Government	186	160	22	-	-	65	432
Total	**5,082**	**230**	**1,581**	**1,019**	**149**	**1,785**	**9,847**

Source: FCS GROUP based on Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

Attachment B-1 Employment Density Assumptions (continued)

Projected Happy Valley Net New 20-Year Redevelopment Building Space Needs (Floor Area)

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	19,000	25,000	-	-	-	11,000	55,000
Medium	26,000	34,000	-	-	-	14,000	74,000
High	32,000	42,000	-	-	-	18,000	92,000

Projected Happy Valley Net New 20-Year Building Floor Area on Vacant Lands (Floor Area)

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	940,000	59,000	496,000	415,000	96,000	519,000	2,525,000
Medium	1,253,000	79,000	661,000	553,000	128,000	692,000	3,366,000
High	1,566,000	98,000	826,000	692,000	159,000	866,000	4,207,000

Projected Happy Valley 20-Year Vacant Lands (gross buildable acres)

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Low	59	5	42	42	8	44	200
Medium	79	7	56	56	11	58	266
High	99	8	70	70	13	73	333

Attachment B-1

Attachment B-1 Employment Density Assumptions (continued)

Land Use Assignment Assumptions

Local Zoning Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail
Commercial	30%	50%	20%	0%	0%	60%
Employment & Mixed Use	60%	10%	5%	5%	0%	30%
Industrial/Government/Other	10%	40%	75%	95%	100%	10%
Total	100%	100%	100%	100%	100%	100%

Assumptions by FCS GROUP based on local observations.

Projected Happy Valley 20-Year Vacant Land Needs Forecast by Zoning Classification, Low

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	18	2	8	-	-	26	55
Employment & Mixed Use	36	0	2	2	-	13	53
Industrial/Government/Other	6	2	31	40	8	4	92
Total	**59**	**5**	**42**	**42**	**8**	**44**	**200**

Projected Happy Valley 20-Year Vacant Land Needs Forecast by Zoning Classification, Medium

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	24	3	11	-	-	35	73
Employment & Mixed Use	47	1	3	3	-	17	71
Industrial/Government/Other	8	3	42	53	11	6	122
Total	**79**	**7**	**56**	**56**	**11**	**58**	**266**

Projected Happy Valley 20-Year Vacant Land Needs Forecast by Zoning Classification, High

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	30	4	14	-	-	44	91
Employment & Mixed Use	59	1	3	3	-	22	89
Industrial/Government/Other	10	3	52	66	13	7	152
Total	**99**	**8**	**70**	**70**	**13**	**73**	**333**

Summary of 20-Year Vacant Land Demand Forecast by Zoning Classification
Happy Valley UGB (net buildable acres assuming current zoning assumptions)

Land Use Classification	Low	Medium	High
Commercial	55	73	91
Employment & Mixed Use	53	71	89
Industrial/Government/Other	92	122	152
Total	**200**	**266**	**333**

Assumptions based on Dec. 2009 Metro 2009-2035 Urban Growth Report assumptions and local observations; compiled by FCS GROUP.

APPENDIX C – EMPLOYMENT BUILDABLE LAND INVENTORY

Happy Valley Economic Opportunities Analysis (EOA)
GIS Methodology

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December 16, 2010

Goal: Create a database for use by FCS Group economists that includes a parcel-by-parcel inventory of non-residential vacant land in and adjacent to the City of Happy Valley's city boundary, including attributes for each valid parcel describing and quantifying constraints to developability.

Methodology Summary: This analysis is based on the City's current city boundary and zoning information; vacant land, parcel, slope, floodplain, wetland, and zoning data available via Metro's RLIS database as of mid-2010; and three custom subareas outside City limits ("*SW Study Area*", "*South Study Area*", and a small exception area, see Data Sources below) defined by the consultant in cooperation with the client and stakeholders. Together, the City limits and subareas make up the study area. Parcels within the study area overlain by the vacant land delineations were selected, then intersected with the vacant land delineation to "clip out" non-vacant portions of those parcels. These vacant portion of parcels were assigned zoning designations according to City data where available and screened for the appropriate zones; non-employment-zoned parcels were deleted.

The vacant portions of appropriately zoned parcels within the study area were then evaluated for a series of possible constraints including the existence of floodplains and wetlands, steep slope conditions, access to major arterials, potential impact of the Sunrise Corridor, and overall vacant, unconstrained size. Contiguity of vacant portions within a single parcel was not evaluated. Constraints were evaluated either qualitatively, as with proximity to arterials, or quantitatively, as with the calculation of constrained acreage per parcel by constraint type. Whole and summary tables were delivered to FCS Group.

Data Sources:

Parcels (incl. ownership and assessed property and improvement value) – METRO RLIS, May 2010
City Limits – City of Happy Valley, November 2010
Zoning – Within city limits: City of Happy Valley, November 2010; outside city limits: METRO RLIS May 2010.
Vacant Land – METRO RLIS, October 2008 (most recent)
Wetlands – METRO RLIS, National Wetlands Inventory augmented with local observations and measurements, May 2010
Flood Plains – METRO RLIS, FEMA Q3 Floodways, 2005
Slope – METRO RLIS
Sunrise Corridor – Real Urban Geographics, modified potential alignment from City of Happy Valley TSP, consisting of a 200' corridor.
"SW Study Area" – FCS Group; Unincorporated land north of Highway 212/224 and east of Interstate 205.
"**South Study Area" –** FCS Group; Unincorporated land south of Highway 212/224, north of the Clackamas River, east of Interstate 205, and west of SE 142nd Avenue.
Exception Area – FCS Group; containing 6 unincorporated parcels near the Sunrise Valley corridor between SE 142nd and SE 152nd Avenues.

Methodology Detail:

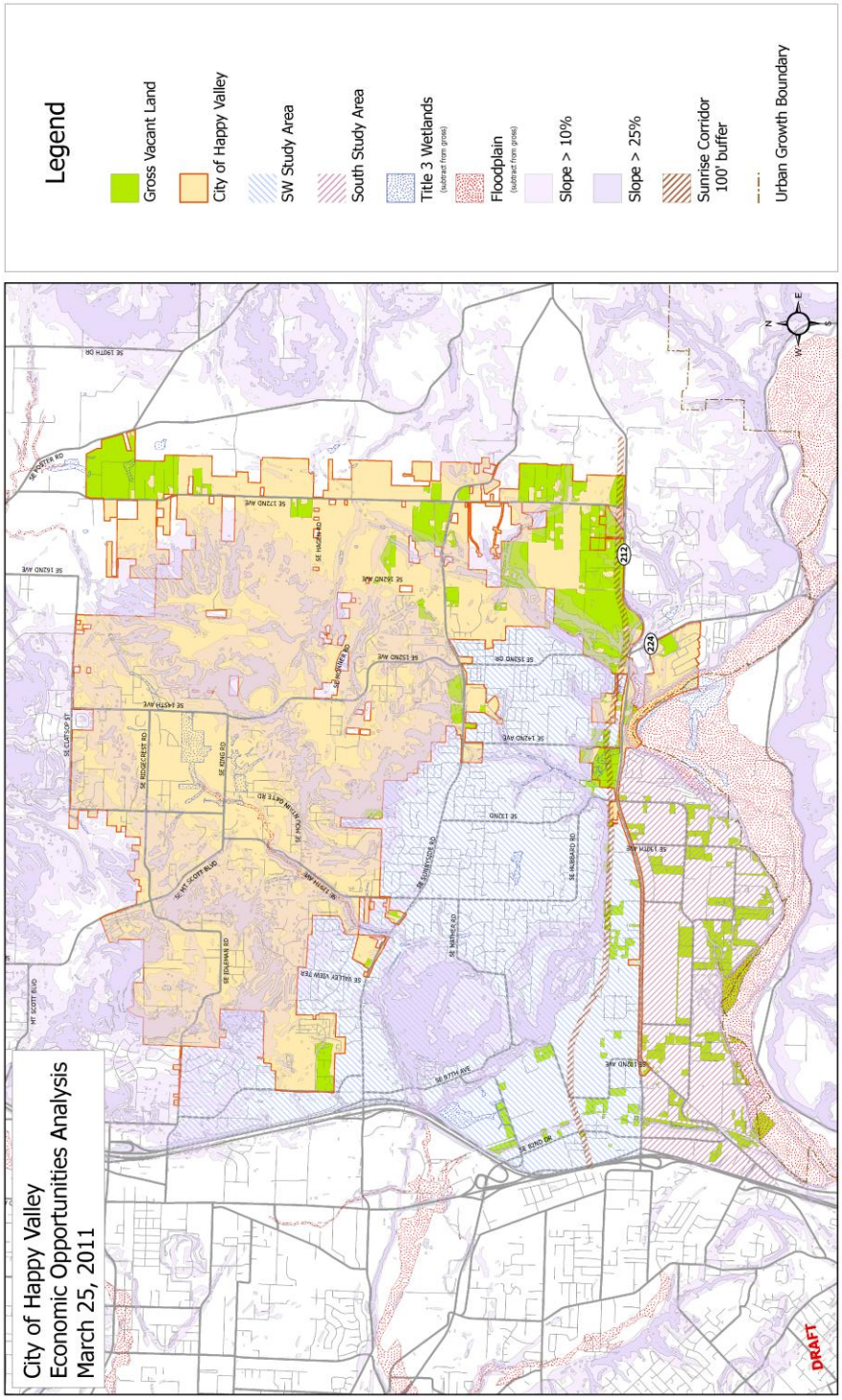
General Note: potential errors due to propagation of unnecessary attributes during the analysis process and fragmentation of individual taxlots during spatial intersections were accounted for. Parcels with less than 100' sq. of vacant land were deleted.

1) GENERATE VACANT LAND DATA *(part 1)*
   a) Select parcels within city limits and subareas.
      i) Use manual selection to refine autoselection where necessary.
   b) Save parcels as new shapefile A.
   c) Select parcels from A that intersect vacant land.
   d) Save parcels as new shapefile B.
   e) Create new attribute [RLISAREA] in B, calculate as [AREA]. *Preserves original area calculation.*
   f) Recalculate [AREA] as geographic area. *Creates new parcel area calculation for redundancy/error reduction.*
   g) Create new attribute [ORIGAREA] in B, calculate as [AREA]. *Preserves new parcel area calculation for redundancy/error reduction.*
2) ASSIGN SUBAREA DESIGNATIONS
      i) Create new attribute [SUBAREA].
      ii) Select parcel within city limits, calculate [SUBAREA] as 1.
      iii) Select parcels within SW Study Area, calculate [SUBAREA] as 2.
      iv) Select parcles within exception area, calculate [SUBAREA] as 3.
      v) Select parcels within South Study Area, calculate [SUBAREA] as 4.
3) ASSIGN ZONING
   a) Create new attribute [ZONE] in B, create spatial join with city zoning layer, and calculate [ZONE] as appropriate zone attribute from city data.
      i) Remove join.
   b) Create spatial join with METRO zoning data, select records where [ZONE] is null, and calculate [ZONE] in selected records as appropriate zone attribute from METRO data.
4) GENERATE VACANT LAND DATA *(part 2)*
   a) Intersect vacant land with B, create new shapefile C.
   b) Cull non-criteria zoning classifications and owners including:
      i) All R* zoning
      ii) IPU zoning
      iii) All MUR* zoning
   c) Cull public owners where ownership is:
      i) Sunrise Water Authority
      ii) State of Oregon
      iii) City of Happy Valley
      iv) Clackamas County
      v) Clackamas County Dept. of Trans.
      vi) Clackamas County Development Agency
      vii) Clackamas Education Service District
      viii) ODOT
   d) Calculate [AREA] in C as geographic area. *Creates new vacant portion area calculation.*
   e) Create new attribute [VACAREA] in C, calculate as [AREA]. *Preserves new vacant portion area calculation.*
5) APPLY CONSTRAINTS *(wetlands, floodplains, size class, slope, infrastructure deficient ("north of Hagan"), future infrastructure impacted ("Sunrise Corridor"))*
   a) Merge wetland and floodplain constraints into new shapefile FW.
   b) Intersect FW and C, create new shapefile C_FW.
   c) Calculate [AREA] in C_FW as geographic area.
   d) Create new attribute [FWAREA] in C.
   e) Join C to C_FW on TLID, calculate [FWAREA] as C_FW[AREA].
      i) Remove join.
   f) Create new attribute [NETVAC] in C, calculate as [VACAREA]-[FWAREA].

g) Create new attribute [SIZECLAS] in C, calculate as [NETVAC] acres where:
   i) aa: > 10 acres
   ii) a: 5 – 10 acres
   iii) b: 2 – 5 acres
   iv) c: 1 – 2 acres
   v) d: .5 – 1 acre
   vi) e: < .5 acre
h) Create new attribute [S10AREA] in C.
i) Intersect 10% slope with C, create new shapefile C_10.
j) Calculate [AREA] in C_10 as geographic area.
k) Join C to C_10 on TLID, calculate [S10AREA] as C_10[AREA].
   i) Remove join.
l) Create new attribute [S25AREA] in C.
m) Intersect 25% slope with C, create new shapefile C_25.
n) Calculate [AREA] in C_25 as geographic area.
o) Join C to C_25 on TLID, calculate [S25AREA] as C_25[AREA].
p) Remove join.
q) Create new attribute [S25NET] in C, calculate as [NETVAC] – [S25AREA]. *Note: the accuracy of this calculation depends on the assumption that wetlands/floodplains and steep slopes are mutually exclusive.*
r) Create new attribute [NHAGAN] in C. Manually select vacant parcels from C in the NE corner of Happy Valley, north of Hagan Drive, and calculate C = 1
s) Create 100' buffer from centerline of Sunrise Corridor preliminary alignment in new shapefile SS100.
t) Create new attribute [SSIDE] in C. Select lots from C intersecting SS100. Calculate [SSIDE] = 1 for selected lots.
u) Intersect C with SS100 to create file C_SS100. Merge features on TLID. Recalculate area.
v) Create new attribute [SS_AREA] in C.
w) Join C with C_SS100 on TLID, calculate SS_AREA as C_SS100[AREA].

End.

Happy Valley Draft Buildable Land Inventory Map



APPENDIX D – EXISTING ECONOMIC DEVELOPMENT POLICIES

The following is a **synopsis of excerpts from the City's existing Comprehensive Plan Policies.** The Comprehensive Plan in its entirety is available at City Hall located at 16000 SE Misty Drive, Happy Valley, OR 97086, Phone 503 783-3800.

CITY OF HAPPY VALLEY
COMPREHENSIVE PLAN

Objectives:

1. To preserve the character of the Valley
2. To improve the quality of existing and future development areas
3. To provide a coordinated direction to the conservative and development of the Valley

Policies:

Commercial and Employment Element Policies

Policy 54: To encourage compatible residential, commercial and light industrial development in both the City of Happy Valley and nearby Clackamas County that will provide jobs. The City supports the development of commercial and employment uses in the Rock Creek Employment Center and in other areas, subject to design standards.

Policy 54A: To reduce vehicle miles traveled and street congestion, and to provide local employment opportunities, Happy Valley will encourage home based businesses that show no outward signs of business activity and fully retain the residential character of existing neighborhoods.

Policy 54B: To comply with Statewide Planning Goal 9 (Economy of the State) and to meet long-term neighborhood-oriented commercial and office needs for existing and future City residents in the Rock Creek Employment Center, Happy Valley has annexed existing and planned commercial and office sites served by Sunnyside Road in the Rock Creek area. In addition, to meet the long term needs of Happy Valley residents for local services and employment land, the City has created a broad range of commercial, employment and light industrial districts.

Policy 54C: Happy Valley shall ensure that all commercial and office centers are accessible by transit, bicyclist and pedestrians, generally as shown within the City's current Transportation System Plan.

Policy 55: To improve the economy of Happy Valley by providing a range of land use types including a variety of commercial and employment districts. The following commercial and employment districts are applicable for any location in the City:

Policy 55A: Mixed Commercial Center (MCC). The Mixed Commercial Center district is intended to establish locations for the development of general commercial centers providing a broad range of shopping and service requirements to meet city-wide needs. The Mixed Commercial Center district, as applied in East Happy Valley, corresponds to the Damascus/Boring Concept Plan's designation of Neighborhood Centers. These mixed use centers in East Happy Valley accommodate retail services with a focus on meeting resident's daily shopping needs. They are planned to be well served by transit and be integrated with mixed use and higher density housing – thus supporting less auto-dependent life styles. These centers are also appropriate locations for civic uses such as post offices and branch libraries. Their design is intended to be highly pedestrian-oriented.

Policy 55B: Community Commercial Center (CCC). Community Commercial Center is intended to provide locations or "nodes" for a range of small businesses and services adjacent to residential areas as a convenience to nearby residents. The Community Commercial Center district, as applied in East Happy Valley, corresponds to the Damascus/Boring Concept Plan's designation of Corner Store centers. These mixed use centers in East Happy Valley accommodate small scale retail and services that meet the convenience needs of neighborhood residents. Mixed use is allowed and encouraged. Access to these centers is provided by well-connected local streets and safe bicycle and pedestrian routes. Their design is intended to be highly pedestrian-oriented.

Policy 55C: Location and compatibility of commercial districts. MCC and CCC districts are limited to areas of Happy Valley annexed after the end of 2004. Neighborhood Commercial uses associated with the Rock Creek Mixed-Use Employment, R-5 and SFA districts may be allowed throughout Happy Valley subject to special standards. The location and compatibility criteria in sub-policies 55B.1-55B.3 apply:

Policy 55C.1: Mixed Commercial Center location and compatibility. New MCC districts shall be limited to an area of up to 15 acres of contiguous land. Building footprint size on any given site is limited to 60,000 sq. ft. per structure. Appropriate locations for MCC districts are generally at the intersection of the following types of streets as designated in the City's TSP:

a) Major or minor arterial street and major or minor arterial street
b) Major or minor arterial street and collector street

All MCC developments involving five acres or more of land are subject to master plan review and design review. In the East Happy Valley Comprehensive Plan Area, a master plan approval is required for the entire lot or parcel proposed for development together with any contiguous lot or parcels owned by the same owner, within the MCC district prior to new development.

In the East Happy Valley Comprehensive Plan Area, one Mixed Commercial Center may exceed the 15-acre limit described above, but may not exceed 20 acres of contiguous property. In this center, the maximum building footprint size is limited to 150,000 square feet per structure, provided the entire contiguous 20-acre area is master planned prior to new development. If the entire contiguous area of this center is not master planned together, the maximum building footprint size is limited to 60,000 square feet per structure. A lot, parcel or other area is not considered contiguous if it is separated from an adjacent MCC district by a public right-of-way. Further, as part of demonstrating compliance with master plan requirements, design review to the Happy Valley Style, and other code criteria, applicants shall demonstrate how: (1) the visual impact of larger scale development has been mitigated; (2) the streetscape is pedestrian-oriented and varied to create visual interest, (3) public amenities are provided and scaled appropriately; (4) transitions to adjacent areas and future development are provided; (5) adequate infrastructure is provided; and, (6) overall design excellence justifies the larger than normal scale of the project.

Policy 55C.2: Community Commercial Center location and compatibility. New CCC districts are limited in size to not more than five acres of contiguous land. Building footprint size on any given site is limited to 30,000 sq. ft. per structure. Appropriate locations for CCC districts are generally at the intersection of the following types of streets as designated in the City's TSP:

a) Major or minor arterial street and major or minor arterial street
b) Major or minor arterial street and collector street
c) Collector street and collector street

Policy 55C.3: Neighborhood Commercial location and compatibility. Neighborhood commercial uses within certain residential districts are appropriately located on lots at the intersection of the types of streets listed below, as designated in the City's Transportation System Plan. There is a corresponding maximum building area for each Neighborhood Commercial development:

a) Major or minor arterial street and collector street: 7,000 square feet per building.
b) Collector street and collector street: 5,000 square feet per building.
c) Collector street and local street: 3,000 square feet per building.

Policy 55C.4: Master plan the neighborhood centers along 172nd Avenue (Borges extension and Sunnyside areas) to ensure excellent, pedestrian-oriented design. The City's master plan, design review and Happy Valley style procedures and requirements shall be used to plan the neighborhood centers.

Policy 55D: Employment Center. The Employment Center designation is intended to provide for a mix of employment opportunities, located where they are accessible by a variety of transportation modes, including transit service and safe and convenient pedestrian connections. These areas:

1) Provide transition between mixed use centers and residential areas;
2) Provide sites suitable for industrial, office, tech/flex, creative arts, high schools and technical schools (that meet code criteria for compatibility in employment areas), and other businesses in multi-tenant and (in some cases) multi-story buildings. The walkable character of the surrounding urban environment is a defining element.
3) Support limited retail and services serving their locales;
4) Allow housing as part of mixed use buildings and sites.

Policy 55E: Industrial Campus. The Industrial Campus designation is intended to provide employment opportunities consistent with Metro's Title 4 requirements. The district is Happy Valley's zone for implementing Metro's requirements for Regionally Significant Industrial Areas. . IC districts are intended to:

1) Protect sites for larger scale industrial users, with exceptions for pre-existing parcels and committed areas.
2) Provide industrial land near appropriate transportation facilities, specifically Highway 212/224.
3) Retain land for industrial use, in part by limiting the size and location of new buildings for retail commercial uses (such as stores and restaurants) and retail and professional services that cater to daily customers (such as financial, insurance, real estate, legal, medical and dental offices) to ensure

they serve primarily the needs of workers in the area. Non-industrial uses will not exceed 3,000 square feet in a single outlet, or 20,000 square feet in a multi-tenant building. Compatible public facilities will be permitted.

4) Provide for public facilities, parks, education and related uses that are compatible with industrial areas.

Policy 56: Due to rapid growth and staffing constraints, the City of Happy Valley has found it necessary to adopt a number of separate, geographically specific, "comprehensive plans" in the overall land use planning for the city. These include the Rock Creek Comprehensive Plan, the Aldridge Road Comprehensive Plan; the Rock Creek Mixed Employment Comprehensive Plan; and, the East Happy Valley Comprehensive Plan. The following policy sections and sub-sections detail specific policies associated with these "mini comprehensive plans" that have been added to the City's greater Comprehensive Plan policies:

Policy 56A: Generally, the Rock Creek Comprehensive Plan and Aldridge Road Comprehensive Plan will determine land uses and guide the provision of Level 1 facilities and services to land annexed to the City that is located roughly north of Sunnyside Road, east of 137th Drive and west of 162nd Avenue as follows:

Policy 56A.1 In the Rock Creek area, Commercial and Office needs will be met through annexation of the existing Sunnyside Village Center, and the planned Mixed Use Employment, Mixed Use Commercial and Mixed Use Residential designations.

Policy 56B: To plan for the creation of the Rock Creek Employment District.

The Rock Creek Employment District is an approximately 146-acre area located generally northwest of the intersection of Oregon Highway 224 and SE 162nd Avenue. The Area has historically been zoned Exclusive Farm Use ("EFU") pursuant to Clackamas County's acknowledged comprehensive plan and land use regulations while it was outside of the Portland Metropolitan Urban Growth Boundary ("UGB"). This area is subject to the Damascus-Boring Concept Plan ("Concept Plan") required by the site's 2002 inclusion within the UGB. The Concept Plan, approved by Metro and the Happy Valley City Council, established that this area will be an Employment Area implementing Metro Functional Plan Title 4, "Industrial and Other Employment Areas." However, the site is not subject to the Industrial or the Regionally Significant Industrial Area restrictions contained in Title 4.

To implement the Concept Plan vision for this site, the City adopted the Rock Creek Mixed Employment ("RC-ME") zoning district consistent with applicable provisions of the Happy Valley Comprehensive Plan and the Metro Functional Plan providing for a variety of employment-generating uses.

The RC-ME district is intended to:

1) Protect sites for larger scale employment generators, medical centers and senior housing, with exceptions for pre-existing parcels and committed areas;
2) Provide employment land near appropriate transportation facilities, specifically Highway 212/224 and 162nd Avenue;
3) Retain land for employment use, in part by limiting the size and location of new buildings for retail commercial uses. Specifically, retail sales uses may

not exceed 60,000 square feet of gross lease area in a single building; or commercial retail uses with a total of more than 60,000 square feet of retail sales area on a single lot or parcel; or, on contiguous lots or parcels, including those separated only by transportation right-of-way; and,

4) Provide for public facilities, parks, education and related uses that are compatible with employment areas.

The City acknowledges that the area's transportation and ecosystems services infrastructure must be improved to accommodate the proposed uses. Accordingly, the implementing zoning ordinance text and map amendments shall address ecosystem services, including the implementation of low impact development strategies and include requirements that the area not be developed until there are adequate transportation facilities for proposed uses as determined by the requirements of the Oregon Transportation Planning Rule found in OAR 660-012-0060(1)-(3) and Statewide Planning Goal 12, "Transportation" and consistent with Happy Valley Land Development Code requirements.

Policy 56C: Overall Policy Framework for the East Happy Valley Comprehensive Plan. The following policies were derived from the goals and principles (originally dated July 13, 2004) of the Damascus/Boring Concept Plan. They are adopted as the overall policies guiding growth and livability in the East Happy Valley Comprehensive Plan area (East Happy Valley). Each policy is made up of its introductory goal-oriented statement, followed by the principles to be used during implementation.

Policy 56C.1: East Happy Valley Community

East Happy Valley will be a well-designed community with core mixed-use areas, livable neighborhoods and a range of job opportunities all integrated with the transportation system, natural environment, open space network and public facilities. Community elements will include:

a) Neighborhoods as the basic "building blocks" of the community.
b) Mixed-use centers that encourage a sense of community.
c) A diverse range of job opportunities.
d) A mix of uses and transit supportive densities along transit streets.
e) A well-connected network of transportation, land uses and natural resource systems to support public transit, walking and bicycling.
f) An integrated system of open space, parks and natural areas throughout the community, using them as an organizing principle for land uses.
g) Pedestrian-friendly public spaces that accommodate outdoor activity and socialization within both residential and commercial districts.

Policy 56C.2: East Happy Valley Employment

East Happy Valley will include a diverse range and adequate amount of employment opportunities. Employment lands will provide:

a) Reasonable amounts of industrial and employment areas to address the employment needs for those living within the area, as well as to contribute to sub-regional needs.
b) Employment uses accessible by a full range of transportation modes (i.e.-automobile, freight, transit, shared ride, pedestrian and bicycle).
c) A mix of retail, civic, and related uses and services to serve the daily needs of the local community.

d) Employment uses that take advantage of and reflect the natural resource qualities of the land, including forested buttes, salmon bearing streams, agricultural products and beautiful views.

Policy 56C.4: East Happy Valley Transportation

East Happy Valley will have an effective transportation system that provides a range of travel options. The transportation system will include:

a) A coordinated land use and transportation system to support a wide range of convenient and attractive transportation choices, including cars, transit, walking, bicycling and other forms of personal conveyance.
b) A transportation system that is safe for all modes of travel.
c) A well-connected network of arterial and collector streets that adequately serves local travel needs and regional and intrastate access and freight mobility needs.
d) A cost-effective, aesthetic and feasible transportation system.
e) A transportation system designed and located to minimize impacts to natural resources while providing for circulation for all modes of travel.
f) A range of street design types that reinforces a sense of community, leaves the mixed-use areas intact and minimizes impact to neighborhoods to support community livability.
g) An interconnected system of bicycle and pedestrian routes that directly connects to community destinations, with special pedestrian amenities on transit streets. In order to provide options for north south travel in the 172nd Avenue corridor, development on both sides of 172nd will provide a connected and continuous pattern of north-south streets that parallel 172nd Avenue.
h) Direct and convenient freight access from employment and industrial areas to regional transportation facilities to reduce the potential for traffic intrusions into neighborhoods and rural areas.
i) A regional and community transit service in mixed-use areas and on key streets that is supported by street design, a mix of land uses and transit-supportive densities.
j) A coordinated transportation system with existing neighboring cities and counties and future planning areas.
k) A transportation system in East Happy Valley that is consistent with Happy Valley's overall Transportation System Plan.

Policy 56C.5: East Happy Valley Natural Resources

East Happy Valley's transition to an urban area over time will also preserve, restore and/or enhance unique areas, natural features, fish and wildlife habitats and special places. As practicable, natural resource implementation will:

a) Protect, enhance and restore water and air quality by:

- Achieving low levels of effective impervious area and high levels of forest protection and restoration;
- Protecting steep slopes and undeveloped floodplains;
- Protecting, restoring and enhancing riparian and upland habitat;

- Preserving, restoring and enhancing headwaters, streams and groundwater systems to achieve clean water;
- Maximizing opportunities to protect and enhance natural watershed functions and processes;
- Managing stormwater to protect hydrology and natural resources, and promote recycling.

b) Protect, restore and enhance ecologically viable fish and wildlife habitat that will sustain the area's native biodiversity and maintain wildlife habitat connectivity within the community and to adjacent natural areas.

c) Minimize development impacts on natural hazard areas including floodplains, landslide areas, and steep slopes.

d) Provide an ecologically linked system of parks, natural areas, farmland, trails and open spaces for community, recreation and natural resource values within the Damascus/Boring area that is connected to the Clackamas River and other natural areas within the region, and ensure adequate coordination with adjacent communities.

e) Minimize impacts on habitat connectivity, ecological viability, air and water quality, and scenic views when developing an interconnected street, bicycle, pedestrian and transit system.

f) Maximize opportunities to protect open spaces that can provide multiple public benefits such as stormwater facilities, parks, trails and utilities without compromising hydrology, habitat, or ecological functions.

g) Seek opportunities to incorporate green street designs and green development practices into the community design and infrastructure plans to minimize negative impacts of development on the environment.

h) For this policy, references to steep slopes shall be interpreted as follows: (1) slopes greater than 25% shall be protected from development, but shall be eligible for density transfers; (2) slopes 15-25% shall be protected through a combination of clustering, transfer of development rights, low density development and other techniques that balance conservation and development rights.

i) Organize land uses to relate to green design elements, including:

- Natural areas as focal points
- Protection of the areas of Scouter's Mountain that are 15% and greater in slope. Transfer of density from area's 15% and steeper may result in clustering in other areas that exceed base zoning – this technique is allowed and encouraged.
- Protection and restoration of vegetation along streams Low impact building design and infrastructure

j) Use the Damascus/Boring Concept Plan's Parks and Schools diagram to guide park and school locations, and, master planning for parks, schools, trails, and greenways. Coordinate development with parks and schools facility plans. Public or private parks, with usable open space, should be within walking distance of all homes.

k) Low impact development practices and infrastructure will be allowed and encouraged in East Happy Valley. The City will be proactive in proposing low impact public works projects.

Policy 56C.6: East Happy Valley Public Facilities

Infrastructure in East Happy Valley will provide adequate and coordinated public facilities and services, including sewer, water, storm drainage, police, fire, parks and schools. Happy Valley supports:

a) Public education facilities in the neighborhoods and throughout the community.
b) Public park, recreation and open space facilities.
c) Police, fire and emergency facilities and services.
d) Cost-effective and feasible sanitary sewer and public water facilities.
e) Cost-effective and feasible surface water conveyance, treatment and storage.
f) Recycling of storm water and gray water.
g) Expansion of the Metro Greenspaces effort in East Happy Valley to preserve and link regionally significant open space areas, parks and regional trails.
h) Minimizing the amount of land needed and reduce capital and operating costs by using land as efficiently as possible by collocating compatible public facilities.
i) Coordinating with the private utilities to meet the need for adequate private utilities (telephone, electrical, natural gas, fiber optic cable, etc).

Policy 56C.7: Balance of Urban Development and Rural Landscape Character

Development in East Happy Valley will balance the creation of a great urban community with respect for rural landscape features. East Happy Valley will:

a) Allow many of the uses and features that provide the existing character and identity, such as visual open space, wildlife habitat, farms (including nurseries, small scale farms and demonstration farms), and woodlots to operate until such time as converted to urban uses.
b) Protect significant views and historic and cultural heritage sites, when so designated in the comprehensive plan.
c) Provide land uses and public facilities designed to be compatible with natural features, using them to provide separation, transition and underlying form for the built environment.
d) Ensure that slope areas (15% and greater) are protected in balance with reasonable development rights for property owners.
e) Organize development and protection according to the basic tenets of Landscape Based Place Making in the Damascus/ Boring Concept Plan: (1) Lands steeper than 25% and significant natural resource areas shall be protected from development via the City's steep slopes overlay, wetland buffers and riparian corridor buffers; (2) Lands between 15-25% slope shall be protected through a combination of clustering, transfer of development rights, low density development and other techniques that balance conservation and development rights; and (3) Lands less than 15% slope shall be available for urban uses.
f) The park, trail, and school system will be linked and coordinated. This will include linkages to ensure local trails connect to the regional trail network.

Policy 56C.8: Urban Design

East Happy Valley will reflect the state of the art of urban design principles and practice, built from centuries of experience, and applied to a new 21st century community. Implementation will include:

a) An overall community design and form that is coordinated with the larger systems of the Portland Metropolitan area.
b) The design of a new community that fits the contours and form of the unique Damascus/Boring/East Happy Valley landscape, and honors local history, climate, ecology, and building form.
c) An overall urban form that is organized into a logical pattern of town center(s), neighborhood centers, corridors, neighborhoods and industrial and employment districts.
d) Great vistas and views at many scales and forms - ranging from the broad landscape vistas, to city views terminated on civic buildings, to the tree-lined neighborhood blocks.
e) Designs that use green spaces and natural features as ways of organizing and connecting physical elements for the community.
f) Well designed streets that serve as part of the public realm for people, as well as transportation corridors for vehicles.
g) Compact, pedestrian-friendly, and human-scale places that support comfortable walking to ordinary activities and interaction with neighbors.
h) The creation of excellent civic buildings and gathering places.
i) Planned transitions (a.k.a. a "transect") from urban core(s) to neighborhoods to rural and resource areas.
j) A plan that sustains and enhances and the economic, ecological, civic/financial and social fabric of Damascus/Boring community in the long term.
k) Implementation of "Happy Valley Style" design guidelines.
l) A varying of building scale and land use along arterial streets to create interest, variety, and an avoidance of the repetition of land uses and building types.
m) Consider designating gateways for entries to the City of Happy Valley.
n) Important cultural and natural names, places, and themes will be used as East Happy Valley urbanizes. Historic or landscape related names should be used for the street, place and neighborhood names.

Policy 100: The funding of improvements, extension of construction Level 1 facilities and services within the incorporated limits of the city shall be the responsibility of those whose land use activities caused such improvement, extension or construction to become necessary. Funding sources may include but are not limited to creation of a local improvement district (LID); outside funding or grants in aid; direct source payment with or without agreement for future reimbursement by other property owners who may utilize the facility or service; other sources as may be identified.

Policy 102: When, as the coordinator of land use activities and service provision to development areas, the City must make determinations regarding fulfillment of the Growth Management Policies and Procedures, the City shall consider recommendations provided by service providers and other affected agencies, including but not limited to the following:

- Clackamas County Service District No. 1 (CCSD#1)
- Sunrise Water Authority

- Clackamas Fire District No. 1 (CFD#1)
- Clackamas County, Department of Transportation and Development (DTD)
- North Clackamas School District No. 12 (NCSD#12)
- North Clackamas Parks & Recreation District (NCPRD)
- Tri-Met
- City of Portland
- City of Gresham
- City of Damascus

Any determination shall be within the parameters of the providers' or agency's own standards, criteria, requirements or plans. The service providers' decision shall be treated as a rebuttable presumption as to the ability of that provider to provide an acceptable level of service. However, the evidence that can rebut said decision must be compelling evidence based upon objective data and the agencies' standards-criteria-requirement or plans in order to controvert the determination of the service provided.

Policy 103: No development of any properties shall be permitted which will interfere or prevent the extension of any Level 1 facilities or services.

APPENDIX E – CLACKAMAS INDUSTRIAL AREA 20-YEAR EMPLOYMENT LAND DEMAND ANALYSIS ASSUMPTIONS

Clackamas Industrial Area Long-Term Employment Land Supply and Demand

In addition to evaluating the vacant and part vacant employment land supply and demand characteristics of the City of Happy Valley, an analysis was also conducted of the land area adjacent to the city (within about one mile) in the area south of the city referred to as the Clackamas Industrial Area. The analysis of the Clackamas Industrial Area supply indicates that there are approximately 226.3 acres of unconstrained land area with employment zoning, as indicated in Table 1.

Table 1. Clackamas Industrial Area Employment Land Supply

	.5 to 1 ac.		1 to 2 ac.		2 to 5 ac.		5 to 10 ac.		10 or more ac.		Total Gross Buildable (less slopes)	
Land Use Class	**taxlots**	**acres**	**taxlots**	**acres**	**taxlots**	**acres**	**taxlots**	**acres**	**taxlots**	**acres**	**taxlots**	**acres**
IL-Industrial Light	18.0	13.4	20.0	25.4	23.0	65.9	3.0	21.1	0.0	0.0	**64**	**125.8**
IH-Industrial Heavy	9.0	6.9	9.0	12.9	0.0	0.0	2.0	12.6	0.0	0.0	**20**	**32.4**
MUE-Mixed Use Employment	1.0	0.7	3.0	2.7	3.0	9.8	0.0	0.0	1.0	34.3	**8**	**47.5**
CO - Office Commercial	1.0	0.7									**1**	**0.7**
CG - General Commercial	8.0	6.1	4.0	5.3	2.0	8.5					**14**	**19.9**
Total	**37**	**27.8**	**36**	**46.3**	**28**	**84.2**	**5**	**33.7**	**1**	**34.3**	**107**	**226.3**

Source: Real Urban Geographics, based on Metro Regional Land Information System, and City of Happy Valley current zoning.

Within the Clackamas Industrial Area, the Clackamas County Development Agency currently owns and is actively marketing approximately 48 developable acres of industrial land area, referred to as the Clackamas Industrial Area Opportunity Site. All of the land supply within the Clackamas Industrial Area is considered to be adequately served by public roads, water, sewer and power and telecommunications infrastructure and part of the short-term land supply.

Land demand within the Clackamas Industrial Areas was derived based on subarea employment forecasts for traffic analysis zones that make up this area, using data from the Metroscope Generate 2.3 model. Metro forecasts for year 2030 were adopted by the Metro Council in 2005, and have been extrapolated to year 2035 by FCS GROUP. As indicated in **Table 2**, the long-term job growth in the Clackamas Industrial Area is expected to increase from 17,796 jobs in 2005 to 27,166 by year 2035.

Table 2. Clackamas Industrial Area Employment Land Supply

			Change:2005-2035	
Sector	**2005**	**Proj. 2035**	**Jobs**	**Percent**
Retail Trades	2,465	3,265	800	32%
Services	4,843	9,557	4,714	97%
Industrial/Other Subtotal	10,488	14,344	3,856	37%
Industrial/Other	*9,964*	*13,627*	*3,663*	*37%*
Government/ Institutional	*524*	*717*	*193*	*37%*
Total	**17,796**	**27,166**	**9,370**	**53%**

Source: Estimates and forecasts are based on Metro adopted housing and employment growth forecasts, 2007; Metroscope Gen. 2.3; extrapolated to 2035 by FCS GROUP; assumes allocation of "IndustrialOther" jobs based upon Oregon Employment Dept. estimates for Clackamas Industrial Area.

Using the similar method for converting job growth into vacant land needs as was used for the City of Happy Valley EOA, FCS GROUP estimated the future vacant land demand that would be generated by a range in 128 to 214 acres of employment land demand over the next 20 years (see **Table 3.**

Based on these findings, it appears that the Clackamas Industrial Area has an adequate land supply of existing vacant employment land area (226 acres) to accommodate expected level of forecasted demand, even under the high growth forecast (214 acres).

Table 3. Clackamas Industrial Area, 20-Year Employment Land Demand Forecast (buildable acres)

Land Use Classification	Low Growth Forecast (acres)	Medium Growth Forecast (acres)	High Growth Forecast (acres)
Commercial	44	59	73
Employment & Mixed Use	14	19	24
Industrial/Government/Other	70	94	117
Total	**128**	**171**	**214**

Assumptions Medium forecast based on Dec. 2009 Metro 2009-2035 Urban Growth Report assumptions; low and high forecast varies the medium growth forecast by 25%. See Attachment E-1 for supporting assumptions.

Attachment E-1 Clackamas Area Employment Density Assumptions

Clackamas Industrial Area Net New Average Annual Employment Forecast (1 Year Forecast)

	Low	Medium	High
Retail Trades	20	27	33
Services	118	157	196
Industrial/Other	96	129	161
Government	5	6	8
Total	**239**	**319**	**398**

Clackamas Industrial Area Net New 20-Year Employment Forecast

	Low	Medium	High
Retail Trades	400	533	667
Services	2,357	3,143	3,928
Industrial/Other	1,928	2,571	3,213
Government	96	129	161
Total	**4,781**	**6,375**	**7,969**

Source: Medium forecast consistent with Metroscope 2.3 and related traffic analysis zone forecast assumptions for the Happy Valley area adopted by Metro Council in 2005; medium and high forecasts vary the medium forecast by 25%.

Job Sectors and Building Type Assumptions

Employment Sectors	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	5%	1%	6%	0%	12%	76%	100%
Services	72%	1%	5%	1%	1%	20%	100%
Industrial/Other	8%	0%	50%	40%	2%	0%	100%
Government	43%	37%	5%	0%	0%	15%	100%

Source: Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

Building Type to Land Needs Assumptions*

	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail
Refill/Redevelopment Rate [1]	5%	10%	30%	50%	80%	5%
Jobs Needing Vacant Land Rate [2]	95%	90%	70%	50%	20%	95%
Building SF Per Job [2]	370	630	550	700	1,100	510
Floor-Area-Ratio [2]	0.40	0.40	0.30	0.30	0.30	0.30
Public Facility Net:Gross Adjustment [3]	1.10	1.10	1.10	1.10	1.10	1.10
Work at Home Adjustment [4]	0.15	0.03	0.05	0.03	0.03	0.03

** assumptions are intended to reflect a long-term average over 20 years, some "ramp up" is expected to attain*
1/ Adjusts for building refill & vacancy allowances.
2/ Building density derived from Metro UGR assumptions.
3/ Allowances take into account land dedicated to public/utility easements.
4/ Allowance based on national statistics by US Dept. of Labor, Bureau of of Labor Statistics, Technical
Source: assumptions are generally consistent with the Metro Draft 2009-2030 Urban Growth Report; modified to

Attachment E-1 (continued)

Projected Clackamas Industrial Area Net New 20-Year Employment Forecast by Building Type, Low

	Office	Govern-ment/ Institu-tional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	20	4	24	-	48	304	400
Services	1,697	24	118	24	24	471	2,357
Industrial/Other*	154	-	964	771	39	-	1,928
Government*	41	36	5	-	-	14	96
Total	**1,913**	**63**	**1,111**	**795**	**110**	**790**	**4,781**

Projected Clackamas Industrial Area Net New 20-Year Employment Forecast by Building Type, Medium

	Office	Govern-ment/ Institu-tional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	27	5	32	-	64	405	533
Services	2,263	31	157	31	31	629	3,143
Industrial/Other*	206	-	1,285	1,028	51	-	2,571
Government*	55	48	6	-	-	19	129
Total	**2,550**	**84**	**1,481**	**1,060**	**147**	**1,053**	**6,375**

Projected Clackamas Industrial Area Net New 20-Year Employment Forecast by Building Type, High

	Office	Govern-ment/ Institu-tional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Retail Trades	33	7	40	-	80	507	667
Services	2,828	39	196	39	39	786	3,928
Industrial/Other*	257	-	1,607	1,285	64	-	3,213
Government*	69	59	8	-	-	24	161
Total	**3,188**	**105**	**1,851**	**1,325**	**184**	**1,316**	**7,969**

Source: FCS GROUP based on Metro Draft 2009-2030 Urban Growth Report; modified to reflect local observations.

Attachment E-1 (continued)

Land Use Assignment Assumptions

Local Zoning Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail
Commercial	60%	10%	10%	0%	0%	60%
Employment & Mixed Use	10%	0%	0%	5%	0%	30%
Industrial/Government/Other	30%	90%	90%	95%	100%	10%
Total	100%	100%	100%	100%	100%	100%

Assumptions by FCS GROUP based on local observations.

Projected Clackamas Industrial Area 20-Year Vacant Land Needs Forecast by Zoning Classification, Low

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	22	0	3	-	-	19	44
Employment & Mixed Use	4	-	-	1	-	9	14
Industrial/Government/Other	11	2	31	22	2	3	70
Total	**36**	**2**	**34**	**23**	**2**	**31**	**128**

Projected Clackamas Industrial Area 20-Year Vacant Land Needs Forecast by Zoning Classification, Medium

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	29	0	5	-	-	25	59
Employment & Mixed Use	5	-	-	2	-	13	19
Industrial/Government/Other	14	3	41	29	3	4	94
Total	**48**	**3**	**46**	**30**	**3**	**42**	**171**

Projected Clackamas Industrial Area 20-Year Vacant Land Needs Forecast by Zoning Classification, High

Land Use Classification	Office	Government/ Institutional	Flex/Bus. Park	Gen. Industrial	Warehouse	Retail	Total
Commercial	36	0	6	-	-	31	73
Employment & Mixed Use	6	-	-	2	-	16	24
Industrial/Government/Other	18	3	51	36	3	5	117
Total	**60**	**4**	**57**	**38**	**3**	**52**	**214**

APPENDIX F – CRITERIA FOR SPECIFIC DEVELOPMENT SITES

Typical Criteria For Specific Development Sites

Development Type	Heavy Industrial/ Manufacturing	General Manufacturing	Food Processing	Hi-Tech Manufacturing & Processing	Campus Industrial/ Electronic and Computer Assembly	Warehouse/ Distribution	Call Center/ Business Services	Office (Class A)	Commercial Shopping Center	Hotel
Typical Size (NCDA)	5 to 25	5 to 10	5 to 10	10 to 25	5 to 25	10 to 25	3 to 5	1 to 5	5 to 10	3 to 5
Location Preference	Interstate, state highway or principle arterial within 1-10 miles	Interstate, state highway or principle arterial within 1-20 miles	Interstate, state highway or principle arterial within 1-30 miles	Interstate, state highway or principle arterial within 1-15 miles	Interstate, state highway or principle arterial within 1-10 miles	Interstate or limited access four-lane highway within 1-15 miles	Along arterial or streets	Along arterial or streets or in down town centers and transit areas	Arterial street visibility, prefers transit areas	Arterial or interstate visibility or downtown centers
Typical Infrastructure	• Water flow ≥ 36,100 GPD • Sewer flow ≥ 32,500 GPD • 1.0 MW Electricity	• Water flow ≥ 17,000 GPD • Sewer flow ≥ 15,300 GPD • 0.5 MW Electricity	• Water flow ≥ 24,900 GPD • Sewer flow ≥ 22,400 GPD • 1.0 MW Electricity	• Water flow ≥ 65,300 GPD • Sewer flow ≥ 58,800 GPD • 2.0 MW Electricity • Fiber-telecom and route diversity	• Water flow ≥ 74,300 GPD • Sewer flow ≥ 74,300 GPD • 0.5 MW Electricity • Fiber-telecom	• Water flow ≥ 11,700 GPD • Sewer flow ≥ 11,700 GPD • 0.5 MW Electricity	• Water flow ≥ 4,600 GPD • Sewer flow ≥ 4,600 GPD • 0.5 MW Electricity • Broadband Internet access	• Water flow ≥ 3,500 GPD • Sewer flow ≥ 3,500 GPD • 0.5 MW Electricity • Broadband Internet access	• Water flow ≥ 4,000 GPD • Sewer flow ≥ 4,000 GPD • 0.5 MW Electricity • Broadband Internet access	• Water flow ≥ 10,000 GPD • Sewer flow ≥ 10,000 GPD • 0.5 MW Electricity • Broadband Internet access

NCDA - Net Contiguous Developable Acres

Source: Compiled by FCS Group based on Business Oregon Industrial Site Certification requirements and industry standards.