The Role of Accessory Dwelling Units in Achieving The City of Eugene's Vision for Compact Growth

Report for the City of Eugene June 1, 2007

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EXECUTIVE SUMMARY

This report has been prepared for the Planning and Development Department of the City of Eugene. The research documented herein took place between June 2006 and May 2007, with the initial research sponsored by a John Yeon Program Grant from the University of Oregon School of Architecture and Allied Arts. The purpose of this investigation is to better understand the role of accessory dwelling units (ADUs) in achieving the City of Eugene's vision for compact growth, with an emphasis on those facing alleys. Current zoning in Eugene allows for accessory dwelling units in all residential zones. The research is focused on documenting existing conditions where ADUs exist as well as understanding better the implications of ADUs being built in the future. In addition, the report examines how other cities are promoting and regulating ADUs on alleys. What can we learn from other examples and what might some recommendations be for creating better neighborhoods if alley development continues? What are the concerns? What are the opportunities?

This is not a proposal but rather a research investigation conducted by Professor Michael Fifield and Assistant Professor Brook Muller of the Department of Architecture in the School of Architecture and Allied Arts at the University of Oregon. The observations included in this report are those of the authors and not necessarily advocated by the City of Eugene. This report relies on a variety of research methods: a case neighborhood inventory, examination of existing standards and conditions, comparative research and case studies on accessory dwelling unit and alley infill standards in other municipalities, and neighborhood input by community representatives (from personal interviews, attendance at neighborhood meetings), to name only a few.

With rising housing costs, a growing population, scarcity of available vacant land, and the risk of environmental degradation associated with growth, it is critical that the City promote residential development models that are sustainable and that meet the needs of its diverse constituency.

Today families are smaller, and more people are living alone and living longer, yet most neighborhoods don't provide the diversity of housing types necessary to accommodate such demographic profiles. Research indicates that neighborhoods with a diversity of housing types offer more options for intergenerational housing, stability, and affordable housing choices.

Although current zoning allows for ADUs in existing neighborhoods with alleys, and while ADUs offer one solution to problems associated with a growing and increasingly diverse population, rising housing costs, and less available land, there has been relatively little development of this housing type. One of the obstacles to building ADUs is cost; permit fees and systems development charges (SDCs) for example are relatively high compared to those for much larger single-family-detached houses, and should be revaluated. One result of this is that some ADUs built on existing alleys, although meeting city zoning standards, may not meet expectations for design quality and neighborhood compatibility.

As with any new development type, ADUs should be environmentally friendly, should not adversely affect storm-water management strategies or cause other environmental problems. Due to their smaller size (e.g., limited to a maximum of 800 square feet in Eugene), ADUs require less embodied energy in construction and lesser life-cycle costs (e.g., heating, cooling, and maintenance) in comparison to more conventional residential development models. For these reasons, ADUs could be one alternative to meeting Eugene's smart growth goals.

In order to gain community acceptance and ensure long-term quality of new structures, especially in existing neighborhoods, the design and implementation of future ADUs should be closely regulated to avoid many of the problems, real and perceived, of increased densities. In the future, the City should develop principles and design guidelines for all ADUs and consider some form of design review to insure ADUs are an appropriate addition to any neighborhood.



Smaller dwelling units are more affordable and have less of an environmental impact than larger dwellings



Map of alley network of South Eugene indicating neighborhoods investigated as part of case study inventory (see Section 3)

INTRODUCTION

The intent of this study is to describe the advantages and implications of compact growth, and in particular to consider the potential contribution that accessory dwelling units (ADUs) along alleyways can play in meeting the City's compact growth goals, growth management policies, and vision for long-term sustainability. While this report studies issues associated with a variety of forms of residential development, the focus is on accessory dwelling units on R-1 low-density residential lots.

Most residents of Eugene would probably agree on the following:

- Eugene's population will continue to grow
- Eugene's population will continue to diversify
- Housing costs are on the rise
- In a best case scenario, growth would be accommodated in a manner that not only minimizes adverse impacts but that contributes to a robust economy, a healthy environment, and safe and attractive neighborhoods in which to live.

Policies in the Metro Plan and adopted neighborhood refinement plans generally encourage a compact development form throughout the Metro area. The primary land use designation in the Metro Plan is Low Density Residential which generally results in a R-1 zoning designation that supports housing up to 10 dwelling units per gross acre. Development within R-1 zoned areas generally falls well below the allowable limit; single family subdivisions are typically developed at densities of 4 to 5 units per acre.

At the same time, Metro Plan policies call for the application of planning approaches that consider the impacts of increased residential density on historic, existing and future neighborhoods and reduce the impacts of higher density development on surrounding uses.

The Eugene Growth Management Study (also known as Shaping Eugene's Future) established a "vision" statement that attempts to tie the 19 adopted Growth Management Polices into a set of broad descriptions for Eugene's future. The statement describing Land Use and Urban Form says,

"Population growth in Eugene will be accommodated through more efficient use of existing urban land. Expansion of the Urban Growth Boundary will be kept to a minimum. The City will encourage higher density in urban areas, provide for mixed land uses, and allow development of vacant land, while maintaining neighborhood character and integrity".

The adopted Growth Management Policies also reflect the policy tension illustrated in that statement in the following three policies:

- "Encourage in-fill, mixed-use, redevelopment and higher-density development." (GMS Policy 2)
- "Increase density of new housing development while maintaining the character and livability of individual neighborhoods." (GMS Policy 6)
- "Mitigate the impacts of new and/or higher density housing, in-fill and redevelopment on neighborhoods through design standards, open space and housing maintenance programs, and continuing historic preservation and neighborhood planning programs." (GMS Policy 9)

The policies outlined above, and many others (see Table 3 on page 15), are simultaneously "in play" and call for some degree of judgment about how all of the policies will be balanced. Typically, that balance is achieved through the selection of one policy over another as the "guiding" policy for the area.

These policies can ultimately only be "balanced" through an examination of the character, history, and development pattern of an area; that is, through a design-based study of a specific area. The "balance" cannot be achieved at the plan review and development approval stages of a project. Instead, the balance must be built into the rules and regulations that govern the development or redevelopment of an area, i.e. they must be reflected in the development regulations that apply to



The City of Eugene's Growth Management Policies acknowledge the importance of neighborhood compatibility and the value of design standards

a specific area. This could have broad implications for future Planning Division work throughout the City.

Eugene finds itself in a period of change, with growing population, housing costs rising sharply relative to incomes, and with increased development pressures on finite open space and natural resources. Given Eugene's reputation as one of America's "greenest" cities, its extensive alley network, a current lack of diverse housing options to meet the needs of a growing population, and - if done properly - the potential of existing neighborhoods to accommodate growth, the construction of accessory dwelling units along alleys might offer one viable development model among several that could help the City achieve its goals [1]. However, several key conditions - regulatory, economic and environmental, as well as issues of compatibility as far as relationships between accessory dwelling units, alleyways and neighborhoods - demand careful attention. The body of this report offers an examination of these conditions, how they are addressed in other cities, and how they might be addressed effectively in the City of Eugene.

SECTION 1

THE CONTEXT OF GROWTH MANAGEMENT IN EUGENE AND THE POTENTIAL OF ALLEY INFILL DEVELOPMENT

This section sets the context for considering accessory dwelling units as an attractive compact growth model, and emphasizes issues of affordability, unmet housing demand and environmental quality.

The existing low-density residential block pattern – typical of western United States cities – is being re-evaluated by many municipalities, including Eugene, in an attempt to better address predicted increases in population, issues of diversity and affordability, diminishing natural resources, increased air pollution, and changes in land use. The dominant housing typology – the large single-family-detached house on a large lot – is, arguably, not the best housing form to address these changes, as the authors hope to demonstrate in this section.

The Dilemma of the Non-Traditional Household

Changes in Household Composition and Size The sustainability of Eugene's neighborhoods, from the standpoint of community diversity and inclusivity, presents an enormous challenge. Demographic trends have led to the demand for a variety of housing choices, yet most of our existing neighborhoods as well as many of our new neighborhoods provide little diversity in housing types, styles, sizes, or floor-plan layouts. The three or four bedroom single-family-detached tract house - once the standard model for the traditional nuclear family consisting of a married couple with children and the family dog – is still the dominant house type being built, yet the nuclear family comprises only 23.3% of all households in the U.S. today – down from almost 40.3% in 1970 [2]. In addition, the average size of a household has gone from 3.35 persons in 1960 to 2.57 in 2005 [3].



The traditional single family house is not meeting the housing needs of a growing percentage of our population (photo by of Cathleen Corlett)

Table 1

Trends in household composition and size that are contributing to the need for a greater diversity of housing types (taken directly from U.S. Census Bureau statistics from 1970 - 2003)

Household Size

- a decrease in the number of households with 5 people or more from 20.9% to 9.8%
- a decrease in the number of households with 4 people from 15.8% to 14.3%
- a decrease in the number of households with 3 people from 17.3% to 16.1%
- an increase in the number of households with 2 people from 28.9% to 33.3%
- an increase in the number of households with 1 person from 17.1% to 26.4%

Household Type

Family Households:

- married couples with children have decreased from 40.3% to 23.3%
- married couples without children have decreased from 30.3% to 28.2%
- other family household types have increased from 10.6% to 16.4%

Nonfamily Households:

- men living alone have increased from 5.6% to 11.2%
- women living alone have increased from 11.5% to 15.2%
- other nonfamily households have increased from 1.7% to 5.6%

Some Reasons Behind Demographic Changes

- People are living longer and the elderly population in the U.S. is increasing as a percentage of the total population. People 65 years of age and older comprise 20.4% of all households. For older adults, 75 years and over, 67% of men and 29% of women were living with their spouse in 2003. In contrast, 50% of women were living alone, compared with 23% of men. With increasing age, both men and women were more likely to live alone.
- The high divorce rate in America, roughly 50%, is resulting in a greater number of singles without children or who are caring for children on a full or part-time basis.
- Housing costs have increased to the point that young singles, couples and even young professionals cannot afford housing by themselves and are forced to live at home with parents or share units with others (see the next subsection "The

Crisis of Affordability"). For people between 18 and 24 years old, 31% of men and women lived with people who were neither their spouse nor their parent. In that same age group, 55% of men (7.6 million) lived at home with one or both of their parents, while the percentage for women was 46%. [4]

Implications of These Changes: Mismatches Between Housing Needs and Availability

As illustrated above, changes in the makeup of the American family, along with the changing circumstances of individual families, present evidence that the current housing supply does not effectively meet the needs of many in our society. For example, the majority of Eugene's housing stock consists of detached single-family homes in neighborhoods where the large, single-family home predominates. "Empty nesters," whose children have grown up and left home, and who want to downsize by changing housing type, are typically forced to look for housing outside of their existing neighborhood where they have lived for years and have established friendships and social networks. In such neighborhoods, elderly family members (e.g., an elderly parent) do not have many options to live near their children and grandchildren, except by living within the same household, which for many is not a desirable living arrangement.

Or, consider the case of two unrelated adults who want to cut costs by sharing a place of residence. As they each have needs for privacy and separation, the common single-family house layout with one master bedroom and bath is less than ideal as it privileges one individual over the other.

In yet another scenario, a divorce might result in a newly formed household consisting of a single parent with child. They may prefer to remain in the same neighborhood they have lived in for years so as to maintain stability (so for example the child can continue to attend the same school) but may find small and affordable housing options to be limited.

The Need for and Benefits of Diverse Neighborhoods The trends enumerated above provide strong evidence of the need for greater diversity in housing types and sizes, as well as the need for affordability. A diversity of housing types can be a real asset to a neighborhood, as well as individual homeowners, and offers one of the greatest opportunities for addressing inter-generational differences and cultural differences associated with race, ethnic background, and income levels. For example, an elderly grandparent who is still active and wishes to live on his/her own, yet near children, can have a more direct connection to a grandchild, perhaps by providing day-care in a more economical manner compared with other (costly) alternatives. And for an elderly person who is not as active as she or he once was, living close to a family member has many advantages. This type of need may be increasing rapidly as baby-boomers become seniors.

The City of Portland has not only recognized the desirability of alternative housing types as a means of addressing issues of affordability and diminishing land availability, but is promoting such alternatives for the benefit of both traditional and non-traditional families, as demonstrated by their upcoming Courtyard Housing Competition. The City of Portland sees great potential for creating community identity and increased security in promoting this alternative [5].

In one sense, single-housing type neighborhoods are examples of exclusionary zoning that segregate one user group from others. Such homogeneity is often at odds with a city's stated desire to promote a variety of housing types to serve its citizens. For example, the City of Portland, Oregon's housing goals (July 2006) seek to promote balanced communities with "mixed-income neighborhoods...that collectively reflect the diversity of housing types, tenures (rental and ownership) and income levels of the region." Another objective states: "Maintain income diversity with neighborhoods by 1) allowing a mix of housing types and tenures, including houses, houses on smaller lots, small houses, duplexes, attached housing, accessory dwelling units...." The City of Portland also seeks neighborhood stability by pro-

moting a "variety of homeownership and rental housing options... and opportunities for community interaction." One specific objective is to "enable people who are elderly to remain in their own neighborhoods as their needs change by supporting...accessory dwellings and small houses...." [6]

In a city such as Eugene, which prides itself on being progressive, inclusive and responsive to the needs of all of its residents, providing not just shelter, but supportive environments in which to dwell, providing not just neighborhoods, but neighborhoods with a sense of community, security, memorable image and character, and a variety of housing options, there are means to achieve greater housing diversity. New development, even if designed on a more inclusive model, will be able to meet only so much of the demand, so it is important to look to existing neighborhoods and to infill development opportunities. While some may argue that the single-familydetached residence is desired by many, are alternative housing types not as desirable because there aren't a lot of good examples, or for some other reason? More demonstration projects as exemplars of good design could help answer that question.

A Crisis of Affordability

The cost of housing as a percentage of overall income is growing at an alarming rate, suggesting that more affordable housing options are in critical demand in Eugene and other cities throughout the nation. Much of the housing that is currently available, as well as housing that is currently being built, are not meeting many peoples' needs or affordability criteria established by the federal government or by other housing advocacy groups. The available housing stock is, for many, too big and too expensive. In determining housing affordability, the Housing Opportunity Index (HOI), published by the National Association of Home Builders (NAHB), compares recent single-family homes sales with local median salaries, and determines the percentage of the homes on the market that could be purchased by someone earning the median salary (from money.cnn.com). In Eugene, housing costs are not nearly as high as in many other cities, particularly those in California, but the median income in Eugene is very low. In fact, the

HOI for the 2nd quarter of 1999 lists the Eugene/Spring-field area as the least affordable of all 182 metropolitan areas in the survey [7]. According to Stephanie A. Jennings, Housing Finance Analyst for the City of Eugene, homeownership in Eugene is an unlikely prospect for those at 100% of median income (a family making the Eugene median income of \$35,850 could only afford a house costing \$140,000 while the median house price in Eugene is \$224,000). Ms. Jennings notes, "Home prices have continued to increase in the Eugene-Springfield area despite cooling in other markets. For this area, median home price increased 12% in the last year. The increasing costs in the homeownership market make it difficult for renters to become homeowners, which further exacerbates the shortage of rental housing."

However, it is Eugene's rental market where there is a "severe housing hardship," according to Ms. Jennings. Two-thirds of low-income families in Eugene cannot afford housing (based on 30% of their gross income). Forty-one percent of those low-income families are paying 50% or more of their income for housing. And even with the average two-bedroom rental costing a formidable \$840 per month in Eugene, the rental vacancy rate is between 0-2%, indicating renters have few options. A more healthy vacancy rate would be 5-6%. [8]

As one means for addressing the issue of affordability, some cities have or are considering waiving, or partially waving, permit and/or System Development Charges (SDCs) to encourage more affordable housing such as ADUs. The City of Ashland, for example, defers SDCs for affordable housing projects for the initial developer/ buyer. The SDC is secured by a second mortgage that is recorded, treated as a loan and accrues interest each year. The new Affordable Housing Action Plan, developed for the city by Sextant Consultants, Inc. and Cogan Owens Cogan of Portland, recommends that the City of Ashland remove this requirement and waive SDCs altogether for affordable units [9]. According to Ms. Jennings, the City of Eugene already has an SDC exemption program (see 7.725 of the Eugene Code), which she administers. Ms. Jennings notes that the amount of funding allocated for the program could certainly be increased to have a greater impact.



Residents of Eugene are rightfully prideful of the natural beauty of the City and Region (photo from Morse Ranch Park in south Eugene)

A Healthy Environmental Future?

Eugenians' 'sense of place,' a feeling of connectedness to the City, Region and State, is defined in great part by the striking beauty of our natural environment. (As an indication, consider the logo for the "Unique Eugene" consortium of locally owned businesses: the logo features Spencer's Butte and several large Douglas firs yet does not include any evidence of human presence. It is highly revealing that an image of idyllic natural splendor is used to stimulate economic growth!). The City and region attracts newcomers in part because of its environmental quality, so as the Southern Willamette Valley continues to grow – it is anticipated that the Region's population will increase 55% to 463,000 residents by 2050 – it is critical to consider relationships between economic growth, different forms of development, and environmental quality, in particular water quality, air quality and habitat quality [10].

Is it possible for the City of Eugene to grow in a manner that maintains or even improves quality of life for its residents while, at the same time, the environment is protected and improved? Growth will undoubtedly include a variety of forms, including new developments in suburban neighborhoods. Here we should look to those few case studies that incorporate state-of-the-art "green" infrastructure, building and landscape design principles, such as the green Pringle Creek mixed-use development in Salem that is currently under construction [11]. We should also be giving thorough consideration to the viability of residential infill development models so as to preserve "greenfield" sites, open space and critical habitat while, at the same time, adding vitality to our urban centers.

The "Envision Utah" project provides one of the nation's most comprehensive studies of the impact of different growth scenarios for a region, in this case Utah's rapidly growing Wasatch Basin/Salt Lake City metropolitan region. In it the impacts of four different growth scenarios are evaluated, with the scenarios representing a range of densities from 5.02 to 8.16 persons per acre (or a range from a continued pattern of dispersed settlement to more compact and clustered growth models), and with the higher density scenarios including residential

infill development within a suite of development types [12]. What distinguishes this study is an effort to quantify the value that the region's inhabitants place on environmental quality; while acknowledging the significant growth pressures that exist, people express far greater concern over future air and water quality than they do over lot sizes or the continued availability of single-family housing relative to other forms of housing [13]. The study reveals that only modest increases in the density of new development can result in a dramatic reduction in water consumption and infrastructure costs per dwelling unit, and a dramatic increase in air quality [14].

What makes the Envision Utah project impressive is the extent of public participation in the scenario envisioning process, which included an initial project study, two regional workshops each involving hundreds of citizens, community options workshops, the distribution of 500,000 surveys, forty-seven town meetings, and quality growth concept workshops. This thorough process has generated a consensus among the regions residents, people of diverse socio-economic backgrounds and political persuasions, of the importance of taking an aggressive stand on growth in the Wasatch Basin (Calthorpe et. al.)

Closer to home, the Lane Council of Governments has evaluated the environmental impact of different growth scenarios for the Southern Willamette Valley Region, with a goal to "help guide growth and development in ways that will minimize the impact on air quality; surface water and groundwater quality; and rare habitat." [15] In the Region 2050 report three scenarios are evaluated: "compact," "satellite" and "rural," with the compact model representing the highest density scenario with the majority of growth occurring in and near existing urban centers and the rural scenario representing the lowest density scenario. With respect to surface and groundwater quality, air quality and rare habitat - namely our signature wetlands, oak woodlands and bottomland forest - the rural development scenario would create the most adverse impact and the compact growth scenario either the least impact or an equivalent impact to the satellite scenario. In short, if the citizens of Eugene prize those habitats that provide our region its distinctiveness and contribute to our own identity, it will be critical to imple-





Continued low density development poses a threat to the wetlands, Oregon White Oak habitat and bottomland forests of the Southern Willamette Valley (photos by of Cathleen Corlett)

ment viable compact residential growth models including infill development.

Another issue to consider is the impact of larger houses on the environment. Alex Wilson, Senior editor of Environmental Building News, cautions us with the following in his article "Small is Beautiful: U.S. House Size, Resource Use, and the Environment."

"As house size increases, resource use in buildings goes up, more land is occupied, increased impermeable surface results in more storm-water runoff, construction costs rise, and energy consumption increases. In new, single-family houses constructed in the United States, living area per family member has increased by a factor of 3 since the 1950s. In comparing the energy performance of compact (small) and large single-family houses, we find that a small house built to only moderate energy-performance standards uses substantially less energy for heating and cooling than a large house built to very high energy-performance standards." [16]

Any discussion of health also ought to include the human health implications of growth, and in particular the walkability of neighborhoods. If a neighborhood is walkable, that is, its residents are within close proximity to services, school and places of work, it is possible to reduce the number of automobile trips per day and therefore the amount of vehicle emissions that impact the quality of the air we breathe. Landis, Hood, and Amado see a connection between infill development and walkability: "infill development, particularly near transit lines and in neighborhoods that are currently 'walkable,' may help slow the inevitable increase in automobile travel both on freeways and local roads" [17]. Several recent scientific studies indicate that the walkability of neighborhoods correlates directly with health risk factors such as obesity and high blood pressure, with "people from the most sprawling areas"...weighing "an average of six pounds more than residents of compact areas." [18] And finally the Envision Utah project indicates that only modest differences in the density of development can



Neighborhoods in Eugene with alleys tend to be walkable, as with this South University example

lead to striking differences in the "walkability" of neighborhoods, with "100% non-walkable" neighborhoods the result of a lower density scenario and "83% walkable" neighborhoods the result of a higher density scenario.

Housing Trends

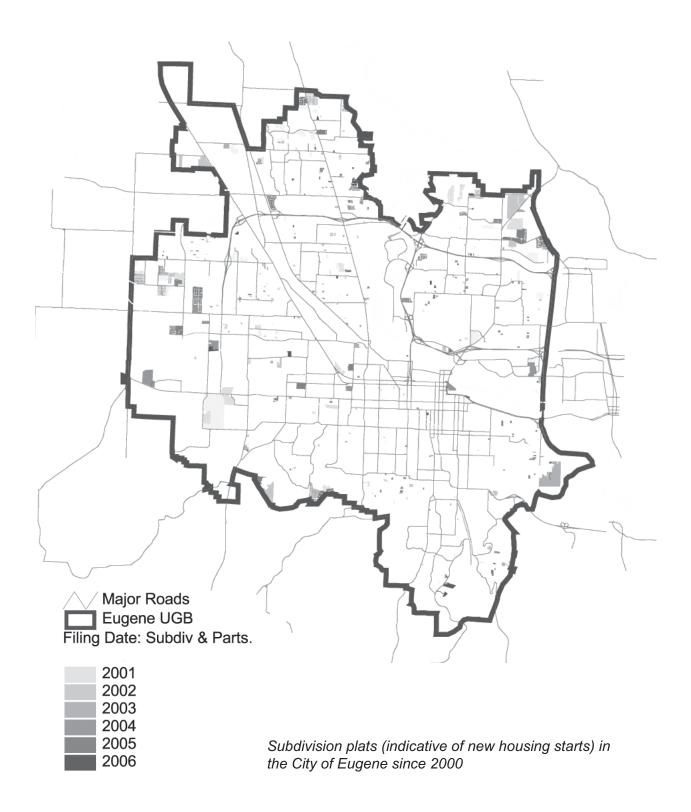
Although the median lot size for a new single-family-detached house in the U.S. has decreased over the past ten years, from 10,000 +/- s.f. to roughly 8,800 s.f., the median house size has increased, from 1,700 s.f. to over 2,300 s.f.. (this in a striking contrast to new houses built in the 1940s and 1950s that averaged 1,100 s.f.). [20,21]

In Eugene, the average home size is increasing over time (see table 2) and is significantly larger than the national average. As far as location of new housing starts, in looking at subdivisions and partitions platted as legal parcels in Eugene between 2001 and 2006, one sees the majority of residential development activity occurring near the urban growth boundary, with comparatively little activity near the City center (see map next page).

The development of smaller lots, a direct consequence of increasing land costs resulting from less land being available for development, is arguably a positive trend given the City's growth management goal to support more efficient use of land. Trends in the size and location of new housing units, however, do not correspond well with the City's growth management policies (see below), aforementioned trends in demographics and affordability, and issues of sustainability and the preservation of environmental quality. As a development type, relatively large single-family houses on relatively small lots and on blocks without alleys offer little flexibility and limited future infill development potential in response to evolving housing needs.

Year	Records	Avg. Home Size
2000	628	2,398
2001	618	2,450
2002	659	2,659
2003	545	2,637
2004	667	2,550
2005	674	2,817
2006	495	2,867

Table 2: Average Size in Square Footage of New Single Family Dwellings in Eugene



Eugene Growth Management Policies

As mentioned in the introduction, the Eugene City Council has adopted 19 growth management policies (in 1998), several of which are relevant to a discussion of residential infill development (see table 3). While the City's adopted policies are laudable, it is not only important to articulate policy direction for increasing the variety of housing types, using land within the UGB more efficiently, etc., but also to provide a workable vision for how this can be achieved.

Eugene is at a critical stage in determining how to maintain and build upon the desired character of existing neighborhoods while providing diverse housing options and promoting sustainable development. This report focuses on one development type – the accessory dwelling unit on an alley – that could be part of the set of solutions for satisfying Eugene's growth management policies. Ultimately a range of development types will be required to meet growth pressures, including single-family-detached housing, multi-family housing, mixed-use nodal development, and attached and detached accessory dwelling units, as appropriate to the neighborhood. As for the latter, it could be argued that lots on blocks with alleys in existing neighborhoods close to downtown are underutilized (see "Case Neighborhood Inventory" in section 3) and offer the potential to accommodate accessory dwelling unit development as one compact growth option among several. It is now time to consider the advantages of and issues related to ADU development along Eugene's alleys.

Table 3 • Selected Growth Management Policies of the City of Eugene

- #1: Support the existing Eugene Urban Growth Boundary by taking actions to increase density and use existing vacant land and under-used land within the boundary more efficiently
- #2: Encourage in-fill, mixed-use, redevelopment, and higher density development
- #4: Improve the appearance of buildings and landscapes
- #6: Increase density of new housing development while maintaining the character and livability of individual neighborhoods
- #7: Provide for a greater variety of housing types
- #8: Promote construction of affordable housing
- #9: Mitigate the impacts of new and/or higher density housing, in-fill, and redevelopment on neighborhoods through design standards, open space and housing maintenance programs, and continued historic preservation and neighborhood planning programs
- #14: Development shall be required to pay the full cost of extending infrastructure

Source: Eugene Growth Management Policies, Resolution No. 4554, 1998

SECTION 2

THE ROLE OF ACCESSORY DWELL-ING UNITS ON ALLEYS AS AN INFILL DEVELOPMENT STRATEGY

The focus in this and the remaining sections of this report are issues and policies related to alley facing detached ADUs in R-1 neighborhoods, with the contention that many of the issues related to this development type such as compatibility are relevant to other development types. This section offers an argument for the desirability of this development model, and why Eugene's alleys present a unique opportunity.

ADUs in Other Pacific Northwest Cities

Many cities allow for accessory dwelling units to be built in one form or another, including the City of Eugene. In Eugene, accessory dwelling units are referred to as Secondary Dwellings and are addressed in Section 9.2741(2) of the City code. Even so, neither accessory dwelling units or secondary dwellings are defined in Eugene's development code. Some municipal codes go further and discuss the purposes and advantages of ADUs. Table 4 offers a sampling of some of the stated purposes of ADUs from a variety of cities in the Pacific Northwest, and Table 5 offers some reasons why ADUs along Eugene alleys are appropriate infill tool for Eugene.

Table 4 • Stated purposes of ADUs from a variety of cities in the Pacific Northwest

Higher Density and Efficiency of Land Use

- Accommodate additional density in existing neighborhoods with minimum cost and disruption to surrounding neighborhoods (Hillsboro, OR)
- · Allow for more efficient use of existing housing stock and infrastructure (Hillsboro, OR)

Affordability

- Add affordable units to the existing housing (Tacoma, WA, Springfield, OR)
- Make housing units available to moderate-income people who might otherwise have difficulty finding homes within the city/county (Tacoma, WA)

Contribute to a Variety of Housing Types

- Provide a mix of housing that responds to changing family needs and smaller households (Hillsboro, OR)
- · Provide flexibility for changes in household size over the course of time (Springfield, OR)
- Provide Homeowners with flexibility in establishing separate living quarters within or adjacent to their homes for the purpose of caring for elderly parents, providing housing for their children, companionship, security, services or other purposes (Vancouver, WA)
- Provide homeowners with a means of obtaining, through tenants in either the ADU or the principle unit, rental income, companionship, security, and services (Tacoma, WA)
- Allow residents, particularly seniors, single parents and families with grown children to remain in their homes and neighborhoods (Hillsboro, OR)
- Develop housing units in single-family neighborhoods that are appropriate for people at a variety of stages in the life cycle (Tacoma, WA)
- Provide a broader range of housing type and cost (Hillsboro, OR)

Cities also make it clear that ADUs need to be designed properly in order that they contribute to neighborhood stability and identity:

Neighborhood Stability

- Protect neighborhood stability, property values, and the single-family residential appearance of the neighborhood by ensuring that ADUs are installed under the conditions of this Ordinance (Tacoma, WA)
- Protect neighborhood stability, property values, and the single-family residential appearance of the neighborhood by ensuring that Accessory Dwelling Units are constructed under the provisions of this Section (Springfield, OR)

Compatibility

• Insure that accessory dwellings are architecturally compatible with the primary structure with which the accessory dwelling is associated (Hillsboro, OR)

Table 5 • Some reasons why ADUs an Appropriate Infill Tool for Eugene

- As the vast majority of Eugene's alleys are in existing, "mature" neighborhoods, ADUs along alleys will likely be within close proximity to existing schools, services, places of work, parks, etc. Therefore there is less need to build more schools and services on the periphery of the City.
- ADUs along alleys tap into existing infrastructure (utilities, roads, etc.) The alleys that exist are in many cases underutilized, being used primarily by garbage trucks and rear-yard deliveries. Additional land is not required to tap into an already existing resource.
- ADUs can contribute to solving a particularly dire housing affordability problem in the City of Eugene. Small size units such as ADUs are much cheaper to build than larger houses.
- There is capacity for development (see "Case Neighborhood Inventory" in Section 3 of this report). The area at the rear of a lot, adjacent to an alley, is typically not occupied by other structures that would make it difficult to build a dwelling unit with a small 'footprint' that, if done in sensitively, would have little physical impact on the visual character of the neighborhood.

SECTION 3

ISSUES RELATED TO APPROPRIATE ADU DEVELOPMENT ALONG EUGENE'S ALLEYWAYS

This section offers a consideration of key issues that need to be addressed in order to realize ADUs along alleys in a manner that contributes to the quality and functionality of existing neighborhoods. It considers regulatory and economic issues as well as questions of design compatibility based on an inventory of 'case neighborhoods' and discussions with neighborhood leaders.

Regulatory Issues

Within R-1 neighborhoods the City allows for an additional dwelling unit on an existing lot, if the lot meets minimum lot size standards, and if the additional dwelling unit meets various zoning standards such as setbacks, height limitations, parking, and maximum unit size (typically 800 s.f.). As the current regulations indicate, these additional small residential units can be either detached (i.e., stand alone) or attached to the existing residence. Most are separate, freestanding units, typically detached and positioned at or near the rear of the lot, with many having access to existing alleys.

As shown in Table 6, Eugene's code allows for the development of ADUs in a manner consistent with other western U.S. cities. While some other cities in Oregon (e.g., Portland and Springfield) allow for ADUs on much smaller lots (e.g., 2,500 s.f. and 4,500 s.f. respectively), Eugene's minimum lot size standards are in close correspondence with cities such as Santa Cruz, California and Boulder, Colorado (5,000 s.f. and 6,000 s.f. respectively). In fact, looking at all requirements, the basic zoning requirements for the City of Eugene are very similar to those of the City of Santa Cruz, CA. Santa Cruz's ADU zoning ordinance is nationally-recognized as a model for effective use of ADUs as a realistic infill strategy. However, the City of Santa Cruz has developed a very extensive set of principles and design guidelines to help insure neighborhood compatibility and good design (and even offers sample ADU designs), whereas those tools are lacking in the City of Eugene.

Table 6
Comparison of Eugene's ADU standards with those of other cities in the western U.S.:

City	Min.Lot size	Min. ADU size	Max. ADU Size	Max. Lot Cover
Eugene, OR Springfield, OR Portland, OR Hillsboro, OR Santa Cruz, CA Boulder, CO	6,000 s.f. 4,500 s.f. + 2,500 s.f. 10,000 s.f. 5,000 s.f. 6,000 s.f.	300 s.f. NA 250 s.f. NA 300 s.f.	800 s.f. 750 s.f. 800 s.f. 750 s.f. 500-800 s.f. 1,000 s.f.	50% 45% 50% 40% 30% 45%
City Si Eugene, OR Springfield, OR Portland, OR Hillsboro, OR Santa Cruz, CA Boulder, CO	5' - 20'* 5' - 20'* 5' 5' - 10' 3' - 5' 10'	Rear Yard Set. 5' - 20* 10' 0' - 5' 0' - 5' 3' - 20' 0'	Max. Height 15' - 20' 30' 30' - 35' 35' 13' - 22' 20' - 25'	Parking 0 1 0 1 1

^{*} If the ADU is on average 15' high or less, side and rear setbacks are 5' If the ADU is between 15' and 20' high, side and rear setbacks are 20'.

Economic Issues

"Without reference to a viable financial model...infill becomes simply a pipedream."

-Landis, Hood, and Amado [22]

Economic issues affect both owners of ADUs as well as ADU occupants. For the owner, the potential of additional income from a rental unit would be desirable if the development costs for the ADU were not overly burdensome. For someone who is looking to build an ADU for an elderly relative, the economics and convenience may be significantly better compared to alternatives such as an assisted living residence. For the relative, affordable housing in close proximity to family and family-care could be very attractive. Along the lines of this scenario, downsizing from a larger house to an ADU on the same property might have economic advantages compared to moving to a unit elsewhere where the location may require additional transportation and other costs. And for the general renter of an ADU, a small, affordable unit that is close to city services could be a very attractive alternative to apartment living on the outskirts of town.

Items that currently contribute to the development costs of an ADU include construction costs (as well as potential design fees), permit fees and systems development charges (SDCs), potential infrastructure improvements (depending on location of sewer, water, electricity and alley condition), financing fees, etc. As indicated in Table 7 on page 21, permit fees and SDCs in the City of Eugene are a much higher percentage of the construction costs for a small ADU compared to a much larger house. Typically, these fees would not be part of a construction loan, but paid before construction begins. Therefore, out-of-pocket expenses are formidable. If development costs are too great, then the potential rental income may not make an ADU a wise investment.

As Table 7 shows, the size of the ADU example is 25% the size of the Primary House example while the fees for the ADU are 78% of the fees for the much larger Primary House. With respect to fees, the City makes no allowances for existing infrastructure already in place and treats the ADU the same as a single-family-detached primary house. The primary differences in fees result from square footages and an assumption that an ADU will lack certain features (e.g., garage, air conditioning, only one bath).

Most alarming is that systems development charges vary only slightly between a new 2,400 s.f. single family house and a 600 s.f. ADU. The impact of a much smaller unit in a developed neighborhood with existing infrastructure suggest that SDCs for certain items could be revaluated (e.g., wastewater, parks, transportation), especially considering the probability of the large house accomodating several occupants including children vs. a very small ADU with potentially only one occupant.

Add to this rising life-cycle costs (e.g., energy) as well as construction costs (e.g. increases in wood products and labor) and the economic impediments to this growth model become clear.

Table 7 • City of Eugene Permit Fee Comparison

Following is a summary of the costs for permit fees associated with the building of a typical 2,400 s.f. house (the average house size being built in the U.S.) versus a 600 s.f. detached ADU in the City of Eugene. (This comparison assumes no unusual circumstances that would affect fee amounts).

Fee Type	2,400 s.f. Primary Unit	600 s.f. ADU
Structural Plan Check	\$ 589.83	\$ 231.63
Building Permit	\$ 980.02	\$ 348.87
Zoning Plan Check	\$ 317.60	\$ 124.73
Electrical Permit	\$ 478.22	\$ 338.26
Plumbing Permit	\$ 894.63	\$ 670.68
Mechanical Permit	\$ 289.27	\$ 163.30
Address Fee	\$ 34.56	\$ 34.56
Public Works Plan Check	\$ 297.00	\$ 297.00
Erosion Prevention Fee	\$ 64.80	\$ 64.80
Subtotal	\$3,945.93	\$2,273.83
Systems Development Charg	es \$5,192.46	\$4,849.74
TOTAL	\$9,138.39	\$7,123.57

Breakdown of City of Eugene Systems Development Charges

Fee Type	2,400 s.f. Primary Unit	600 s.f. ADU
Transportation*	\$ 1,534.29	\$ 1,534.29
Wastewater-Regional (MWN	1C) \$ 1,053.13	\$ 1,053.13
Wastewater-Local**	\$ 193.20	\$ 48.30
	\$ 331.91	\$ 331.91
Stormwater	\$ 478.50	\$ 297.00
Parks	\$ 1,344.65	\$ 1,344.65
Subtotal	\$ 4,935.68	\$ 4,609.28
City Administrative Fee (5%)) \$ 246.78	\$ 230.46
Regional Wastewater Admin	Fee \$ 10.00	\$ 10.00
Total SDC Fees	\$5,192.46	\$4,849.74

^{*} Number of Units x Adjusted Trip Rate x Cost per Trip = 1 x 1.01 x \$1,519.10

In addition, EWEB has additional fees as follows:

For a new single-family-detached house, the standard 5/8" meter costs \$1,450. SDCs would be \$2,167. Total Costs would be \$3,617.

For a new ADU, with separate meter but no additional irrigation, the costs would be \$1,450 for the meter. SDCs would be \$963. Total costs would be \$2,413.

For a new ADU, but without separate metering, there would be no meter costs and no additional SDCs. A separate meter is not required.

Note: EWEB has set aside \$100,000 per year for waiver or partial waiver of SDCs for affordable housing. The City of Eugene determines how those waivers should be assigned. Typically they go towards affordable multi-family projects. For example, +/- \$96,000 in waivers of the \$100,000 is going to one new project this year.

(Source: Chris Bigelow, EWEB Water Engineering Technician III. Telephone: 684-5812)

^{**} Number of DUs x \$331.91 + Living Area in s.f. x \$0.0805

Westside Friends Amazon

Diagram indicating location of neighborhoods inventoried as part of this study



16th Avenue between Oak Alley and Lawrence Street functions as an alley



ADU and primary dwelling unit in the Westside neighborhood

Accessory Dwelling Unit Functioning, Character and Compatibility

In addition to a consideration of the existing regulatory framework and economic issues related to the development of accessory dwelling units along alleys in Eugene's R-1 zoned neighborhoods, it is also critical to address considerations of ADU, alley and neighborhood functionality, character and compatibility. Assuming a viable, incentive-oriented economic model is put in place, and there is going to be an increase in the number of ADU "starts" along alleys (more ADUs being built), how is it possible to ensure that such development contributes to, rather than compromises, the quality and functioning of existing neighborhoods?

Case Neighborhood Inventory

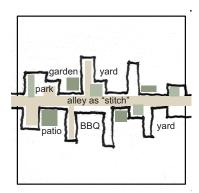
A "case neighborhood" inventory and analysis provides one means for understanding potential issues related to the quality and functioning of accessory dwelling units in relation to alleys and neighborhoods (see the map in the introduction to this report). In this study, three R-1 case study neighborhoods were inventoried - Friendly, Amazon and Eastside, and for comparison's sake two R-2 neighborhoods/conditions - Westside and 16th Avenue between Oak Alley and Lawrence Street, a unique "alley-like" street. Despite distinctions between the neighborhoods as far as topography, proximity to downtown, the condition of alleys, etc., there are numerous and striking similarities. All have extensive alley networks and are within close proximity to open space, schools, services, and public transportation. Alleys are typically oriented north/south, although in Westside and other areas numerous alleys run east/west.

Lot dimensions and sizes are comparable within the case neighborhoods, with the vast majority extending from street to alley and on the order of 50'-60' wide and 120'-150' deep, or 6,000 to 9,000 square feet in area. These are not huge lots, but because they face alleys, there is significantly greater access to 'backyard' ADUs than would be the case for lots in neighborhoods without alleys. The majority of primary residential structures on lots are 1 to 1 1/2 stories in height and were built between 1915 and 1960. Many have garages or carports built some time after the original dwelling. These residential structures support a mix of owners and renters.

The majority of lots do not have alley-accessed dwelling units on them; a lot-by-lot inventory of the Amazon neighborhood for example reveals that on average there are only 1-2 ADUs per block. With respect to the scale and character of ADUs and other structures along alleys, the recent "Chambers Reconsidered" report finds, "buildings built on alleys are smaller than houses that front the streets. The best of these help to create a 'cottage-like' environment (Lowe et. al., p. 15)." Unfortunately, the case neighborhood inventory would seem to indicate that 'best case' ADUs are the exception rather than the rule. While many of the street-facing primary dwelling units in a given neighborhood were built at a similar time and are therefore of similar character, ADUs built later are of a much greater stylistic variety, and many documented as part of the inventory seem to have been designed with insufficient regard to those positive architectural qualities that contribute to overall neighborhood identity. These qualities include scale, massing, spatial organization, architectural detail, proportions, fenestration (windows), and building materials (see "Primary Concerns of Neighborhood Activists and Residents" and "A Hypothetical ADU Development Scenario" below).

Within the case neighborhoods the alley seems to function as a "stitch" or backbone for many of the activities associated with both primary and accessory dwelling units, having an informality that contrasts with the relative formality of the relationship between primary dwelling units and street. In strolling along Eugene's alleys on a summer afternoon one can see a tangle of utility lines linking up to residences, boats in storage, community supported agriculture distribution centers operating out of shed structures, staging areas for home improvements (neatly stacked piles of lumber and asphalt shingles, etc.), ADU inhabitants preparing for a barbecue, and horticultural enthusiasts tending their vibrant, well-maintained gardens. One notices fences separating backyards and alleys for perhaps half of the lots, depending on the neighborhood: for many the relatively social or public nature of the front yard is balanced with a more private or hidden backyard.

As for patterns of parking and vehicular access, if alleys on Eugene's Westside are typical, it would appear that no one pattern predominates, with covered and uncovered parking spaces arranged both perpendicular and parallel to alleys (see images next page).



The alley is a "stitch" that links dwellings, service structures, outdoor rooms, paths, people and activities







Spaces adjacant to the alley serve as "staging areas" for numerous activities







Examples of Westside alley parking configurations suggest no one pattern predominates



Eugenians enjoy the natural character of their backyards and alleys

Primary Concerns of Neighborhood Residents
As part of Professor Michael Fifield's Community Design course in the winter of 2007, students conducted interviews with neighborhood activists and attended neighborhood association meetings to ascertain primary concerns with respect to ADU and other types of infill development such as mixed-use nodal development and opportunity siting. These concerns center around issues of neighborhood compatibility and may be summarized as follows:

Noise, Traffic and Congestion

Paul Conte, neighborhood advocate for Jefferson and Westside Residents for Healthy Neighborhoods, has "no problem with small scale, owner occupied ADUs" but worries "that if everyone had one, noise and congestion would ruin a peaceful, backyard atmosphere" (interview by Ashley Tackett). Along similar lines, residents attending February 2007 Amazon Neighbors Steering Committee Meeting seemed to appreciate the undeveloped nature of their alley system, with one attendee suggesting that "it keeps the traffic slow" (interview/report by Matthew Travis).

The Importance of Owner Occupied Units
Participants in the Amazon Neighbors Steering
Committee Meeting also expressed concern as
to how the City would ensure that owners would
continue to occupy either the primary or accessory dwelling unit if more ADUs get built (as is the
current City standard). Presently the City requires
a notice of occupation to be recorded with Lane
County, but only checks to see if the owner is occupying one of the two units if a neighbor makes
a complaint; several attendees felt this was inadequate (from interview/report by Megan Miller).

Landscape Character

Perhaps to no great surprise given Eugenians' passion for the environment, neighborhood residents feel strong attachment to the 'natural' character of their alleys, and especially the presence of dense foliage of mature 'legacy' trees and other vegetation in backyards along alleys. Ashley Tackett sheds light on this concern in

summarizing a portion of her interview with Paul Conte, "Within the interior of these blocks, some with alleys, some without, large trees had room to grow and create the scenic fabric of the area. Viewsheds lead the eye to wide swaths of green within the backyards of these streets. One of Paul's major concerns was the destruction of this vegetative fabric, resulting in a barren landscape."

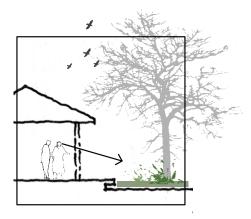
If More ADUs are to be Built Along Alleys, There Should not be too Many

A portion of Mark Steinhardt's interview with Paul Conte centered on the 'proper' capacity of ADUs on alleys: "Paul seemed to think that small ownerbuilt ADUs are great and alleys can probably support about six of them per block before the traffic load becomes a problem. But his point was that this type of development is just not dense enough to reduce development, putting pressure on the urban growth boundary. He also felt that the potential residents were different slices of the population for these two types of development (referring to ADUs and multi-unit developments in opportunity sites)."

It should be noted that discussion with individuals and neighborhood representatives was limited to only a small sampling of individuals. Any follow-up study or development of design guidelines should include much greater public input to best ascertain a broad spectrum of viewpoints and concerns.



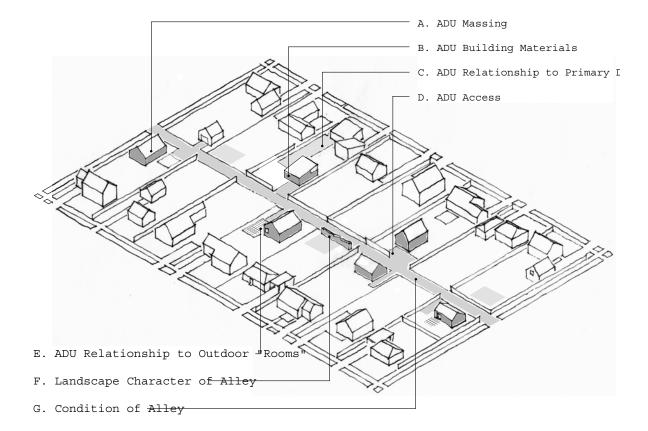
In any infill development scenario, it is important to retain if not enhance the vegetative fabric



Smaller houses in denser configurations make high quality indoor-outdoor relationships critical

A Hypothetical ADU Development Scenario as a Basis for Summarizing Key Issues

Given the insights gleaned from the case neighborhood inventory and given a sample of the convictions of neighborhood residents, who express particular concern over density, character and alley functioning, what follows is an ADU development scenario for a hypothetical alley and block in an R-1 neighborhood in South Eugene. This scenario uses Paul Conte's "optimal" addition of six ADUs per block as the speculative basis for an appropriate level of development. This is not a development proposal but rather a means to more clearly illustrate, summarize and systematize a range of issues as a basis for subsequent discussions with the community, policy recommendations, and research tasks identified in Section 4 of this report.



ADU development scenario for a hypothetical alley and block in an R-1 neighborhood in South Eugene

Design and compatibility questions and issues this scenario identifies that might have policy implications

A ADU Massing

- What is the influence of ADU massing, siting and size on neighborhood character?
- How does the scale and form of an ADU help foster a sense of privacy within a denser infill context?

B ADU Building Materials

- What are a range of acceptable materials?
- Is it important that ADU materials (especially exterior cladding) match those of the primary residence?

C ADU Relationship to Primary Dwelling Units

- The relationships between inhabitants of ADUs and primary residences are not uniform. In some instances the owner occupies the primary residence and a renter occupies the ADU, and in other cases it is the reverse. In still other cases, relatives occupy the ADU and primary residence. How can the design of the ADU and related elements (yards, driveways, walkways, outdoor rooms, etc.) ensure sufficient flexibility in response to changing needs? (given the scenarios just enumerated, in some instances close connections between ADU and primary residence would be desired; in others there is a need for some measure of privacy and separation between residences).
- What is the relationship between primary house, rear yard and alley? Does the primary house have an inward focus or does it open up to the rear yard and engage it?
- Where is off-street parking for the primary house (front of house, side, rear yard) and what type is it (attached garage or carport, detached covered space, uncovered parking)?
- What is the predominant height of primary houses (e.g. one story or two story)?



Sensitive massing and use of materials for alley accessed dwelling uniit



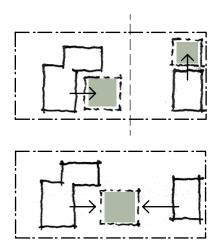
Thoughtful relationship between ADU (foreground right) and primary dwelling



Walkway connecting ADU to street



An alley-facing ADU



Outdoor "rooms" mediate relationships between street facing houses and accessory dwelling units.

Upper: separate outdoor spaces respect individual unit privacy

Lower: shared outdoor room celebrates ties between unit inhabitants (for example in the case of a family in main house with "granny" unit behind)



Trellises and other landscape architectural elements can contribute to alley character

D ADU Access

- Is there a desirable orientation for the ADU in terms of access and alley character (does the ADU face the alley)? How does ADU/primary residence relationships affect this question?
- With more people living in ADUs along alleys, what will the impact be of additional alley traffic?
- How are ADUs "serviced"? (mail, trash, etc.)

E ADU Relationship to Outdoor "Rooms"

· In a denser (infill) context, with people occupying 800 square foot ADUs, the importance of meaningful indoor/outdoor relationships and outdoor "rooms" such as patios and terraces becomes paramount. As C.S. Lewis writes in The Lion, the Witch and the Wardrobe, "The inside of a space is bigger than the outside," meaning in this context that an ADU can "borrow" the landscape if designed properly and feel more voluminous despite its small size relative to the average size of residences.

F Landscape Character of Alley

· What role do elements such as fences, trellises and gates in association with ADUs play in contributing to alley and neighborhood identity?

G The Condition of the Alley

 See next subsection 'Alley Standards' below for a thorough consideration of this topic.

Alley Standards

Given the possibility of the construction of new ADUs along Eugene's alleys, how should we think about the alley itself? Many alleys are poorly maintained and inadequate, not allowing vehicular access in the rainy/ muddy winter months. As seen from comments by some neighborhood residents, unimproved alleys have the desirable effect of minimizing traffic. However, other residents use the alley as their primary means of vehicular access. Is there a middle ground that might provide suitable alley character while addressing concerns of traffic and noise? The City is correct to have an improvement program, but when considering other municipalities' alley improvement and maintenance programs, one might encourage that Eugene adopt less material intensive and more environmentally friendly standards. Vancouver, B.C., through the use of "sustainable lanes," offers one set of alternative standards. One of their goals states: "By increasing the area available for rain water to be absorbed in the ground we can decrease the amount of water going into the storm sewer." To achieve their sustainable lane goals, the City of Vancouver has developed two alternative lane types: Country Lanes and the Centre Strip. Country Lanes have narrow parallel paved surfaces with landscape strips in between and landscaping on the sides. Centre Strip lanes provide a wider driving surface with landscaping on the edges and allow for some water to be absorbed into the ground. [23]

Other alternatives to full paving of alleys include porous pavers or materials such as Grasscrete, a unit-block material that allows grass to grow in the cavities of the paver. Whatever the solution, as the City of Eugene's Chambers Reconsidered report suggests, the effective functioning of alleyways may have more to do with subsurface conditions than the topping layer.

Given the case neighborhood inventory, residents' sentiments and use patterns, and the City's current standards, it is apparent there are numerous issues to consider, including the costs of alley improvements and who pays for them, who maintains the alley, the need for an appropriate surface and subsurface conditions to support the weight of garbage and fire trucks, bicycle and pedestrian use, noise, traffic calming, etc. These issues demand additional study.



The condition of many of Eugene's alleys in winter discourages foot, bike and vehicular traffic



Example of Country Lane in Vancouver (photo from the City of Vancouver website)

SECTION IV

CONSIDERATIONS FOR AUGMENT-ING OR IMPROVING ADU STAN-DARDS AND RELATED RESEARCH TASKS

Previous sections of this report provided a context for growth related issues in the City of Eugene, described the advantages of accessory dwelling units on alleys in R-1 neighborhoods, and considered specific economic, regulatory and design related issues surrounding ADU development in existing neighborhoods. This concluding section provides recommendations for ways of improving or augmenting current ADU standards, with an emphasis on neighborhood compatibility and economic incentives. It also identifies specific future research tasks and other initiatives related to this effort, arguing in particular for the importance of a community education/engagement strategy to generate public interest and input with respect to future ADU policies and development.

Addressing Design Compatibility

The City's compact growth goals and ADU policies are commendable, but compatibility issues - central to neighborhood concern over (and opposition to) infill development - need to be more explicitly and effectively addressed. For example, aside from setbacks and maximum ADU size and height requirements, Eugene's current regulations offer little treatment of design and compatibility issues identified in Section III. A survey of other municipalities' ADU standards and policy approaches has revealed a diversity of options for encouraging alley infill development while preserving neighborhood scale and character. The City of Santa Cruz' ADU ordinances offer one model where a combination of prescriptive and performance-based regulations, design guidelines. examples of ADU designs, and helpful tips in the development process, have received national attention. The Chambers Reconsidered report offers another set of design guidelines, in addition to the adopted ordinance, for addressing compatibility, providing, as it does, for example standards for building heights, massing and window setbacks. Although intended for one Eugene

neighborhood, the Chambers design guidelines could be translatable to other neighborhoods.

Using these as a basis, it is recommended that the City develop illustrated design principles in conjunction with revised ADU standards in order to better ensure compatibility. Such design-oriented guidelines ought to contend with compatibility issues identified in Section III, with particular attention to:

Landscape Character

Given Eugene's reputation as the "greenest city in the U.S.," the passion for trees and greenery amongst its inhabitants, and our friendly temperate climate, any design guidelines ought to address landscape standards.

Outdoor "Rooms"

Design guidelines ought to address the need for ADU dwellers to have access to meaningfully connected outdoor spaces or "rooms"

Alley Paving Standards

The full range of paving types and alley surface treatment improvements needs to be considered. Issues to consider include, but are not limited to: traffic, noise, walkability/bicycles, urban heat sink (i.e., increase in the temperature due to greater land coverage by various heat absorptive surfaces), habitat, storm-water management, initial costs, maintenance costs, emergency and vehicle service access, and neighborhood compatibility.

Material Compatibility and Material Alternatives
Many municipalities require that exterior cladding and other materials used in the construction
of ADUs match those of the existing house. This
assumes that appropriate materials and colors
already exist and are a positive contribution to a
neighborhood. However, simply matching materials, especially if the existing materials are not
appropriate, might actually contribute to a less
than desirable neighborhood. Proposed guidelines must address issues of materials directly.
It is quite possible that alternative materials may
be a better addition to an alley environment than
simply replicating what is already there. It is a

matter of design that is very hard to regulate with prescriptive standards. Therefore, a well-defined set of design guidelines are needed.

ADU Capacity

In the hypothetical scenario in Section III, the design and compatibility implications of the construction of six new ADUs along an alley on one block were considered. Given changes in the economic or regulatory climate it is possible that more than six would be proposed. Future research ought to address the implications of increased density.

Means to Better Ensure an Owner Occupied Unit
To ensure neighborhood stability, there needs to
be a better mechanism for ensuring that following the sale of a house and associated ADU, the
(new) property owner will continue to reside in
one of the two units. The current policy of the City
taking action following a complaint of a neighbor
seems inadequate. Deed restrictions offer one
such mechanism that deserves consideration.
Yearly reporting and certification of that one unit is
owner occupied might be another option.

Economic Incentives

Revisiting the Current Fee Structure Landis, Hood, and Amado, in their article "The Future of Infill Housing in California," suggest in their consideration of policy recommendations promoting infill development the need to both "streamline the development entitlements process" and to "create new sources of infrastructure and off-site improvement financing for infill projects." The City needs to be more aggressive in creating a positive economic climate for the construction of ADUs, versus the current fee structure that penalizes those who are trying to improve their economic standing while contributing to growth management by building ADUs (see "Economic Issues" in Section III). To begin, the City might consider providing permitting and systems development fee waivers, and also direct EWEB fee waivers to ADU proposals with separate meters.

Reducing Construction Costs

The viability of alternative materials and construction techniques such as straw bale and cob construction deserves further research. Such materials may not compromise neighborhood character - and can perhaps contribute to enhanced character - and might reduce construction costs.

Community Education and Engagement

The aforementioned "Envision Utah" project has been a success in large measure because of the extent to which it engaged the citizenry in relating values to growth alternatives. In "The Future of Infill Housing in California," Landis, Hood, and Amado also identify the need to both "improve the amount and quality of available information on potential infill development opportunities" (one of the primary reasons behind this very report) and to "develop a comprehensive community education/engagement strategy to generate public interest for infill housing" (this report offers one component to this). The City should consider disseminating relevant information from this report and other sources to not only the City Planning Commission and City Council, but also to neighborhood associations and citizen organizations. The issue of responsible growth ultimately affects all Eugene residents in one way or another, therefore much public awareness and discussion should be encouraged.

Conclusion

ADUs might be a viable means to address a number of important issues: Eugene's compact growth goals, more affordable housing, greater diversity of housing types, diversity of neighborhoods, environmental quality, transportation efficiency, neighborhood stability and security, etc. However, the economics and fee structure associated with ADU development deserve considerable attention. Further, current prescriptive zoning standards may not adequately address important issues such as neighborhood compatibility, noise, traffic, privacy, etc. It is important for the City to consider the role of ADUs in fulfilling City goals for compact growth, and, if determined to be one of the desired development models, to implement meaningful design guidelines to help insure neighborhood compatibility in the future.

APPENDIX A: DEFINITIONS

Accessory Dwelling Unit: an additional, self-contained housing unit that is secondary to the main residence. ADUs are sometime referred to as "granny units" or "mother-in-law units" since many ADUs were initially construction to provide housing for family members.

Compact Growth: increasing density within the urban growth boundary to avoid sprawl at its periphery.

Smart Growth: a set of urban planning and transportation strategies for concentrating growth within cities to avoid urban sprawl; smart growth advocates compact, transit-oriented, walkable, bicycle-friendly land use, including mixed-use development with a range of housing choices.

Nodal Development: a concentration of higher-density, mixed-use, pedestrian- and transit-oriented development within identified centers with existing infrastructure capacity and serviced by transit.

Opportunity Siting: a strategic planning tool aimed at facilitating the construction of dense(r) housing that is compatible with existing development in the surrounding neighborhood. The process will identify specific sites and provide incentives, such as financial, regulatory, or procedural incentives, to encourage development according to design standards that result in compatibility with, and support from, the surrounding neighborhood.

Specification Standards: a zoning tool that specifies what and where buildings and uses are allowed. Typical specification, or prescriptive, standards include setbacks, height limitations, parking requirements, etc.

Performance Guidelines: state the desired final outcome without being overly specific as to how it is to be achieved. Because the response to a performance guideline may be interpreted in many ways, some form of design review is usually required.

Sustainability: The 1987 Brundtland Commission defines sustainability as "the ability for present generations to meet their needs without compromising the ability of future generations to meet their needs."

Urban Growth Boundary: a UGB is a line that separates areas where development is allowed and areas where development is restricted. UGBs encourage development in existing urban areas and preservation of land outside the boundary.

APPENDIX B: REFERENCES

- 1 The National Geographic Green Guide ranked Eugene the number one Green City in the U.S. in 2006 (www.thegreenguide.com)
- 2 2003 U.S. Census
- 3 "Households by size: 1960 to Present" (http://www.census.gov/population/socdemo/hh-fam/hh4.pdf)
- 4 All demographic statistics pp. 5-6 from the 2003 U.S. Census (http://www.census.gov/prod/2004pubs/p20-553.pdf)
- 5 From Bill Cunningham, Planner, Bureau of Planning, City of Portland. Phone: 503-823-4203
- 6 http://www.portlandonline.com/shared/cfm/image.cfm?id=141401
- 7 http://money.cnn.com/pf/features/lists/nahb housing affordability/affordability.exclude.html
- 8 All Eugene affordability and vacancy statistics provided by Stephanie A. Jennings, Housing Finance Analyst for the City of Eugene
- 9 http://www.ashland.or.us/Page.asp?NavID=1924
- Payne, Susan; Heinkel, Carol; Region 2050 Regional Policy Advisory Board; and Region 2050 Regional Technical Advisory Committee, *Environmental Resource protection in the Southern Willamette Valley Region 2050: Evaluating Region 2050 Alternative Futures*, March 2005, pp. 2-3 (http://www.region2050.org/)
- 11 see: www.pringlecreekcommunity.com
- 12 Calthorpe Associates, Envision Utah and Fregonese Calthorpe Associates, *Envision Utah: Producing a Vision for the Future of the Greater Wasatch Area*, April 2000, p. 30 (see also: http://www.calthorpe.com/Project%20Sheets/Envision%20Utah/envision_utah.html)
- Calthorpe Associates, Envision Utah and Fregonese Calthorpe Associates, *Envision Utah: Producing a Vision for the Future of the Greater Wasatch Area*, p. 49
- 14 Calthorpe Associates, Envision Utah and Fregonese Calthorpe Associates, *Envision Utah: Producing a Vision for the Future of the Greater Wasatch Area*, pp. 27-37
- Payne, Susan; Heinkel, Carol; Region 2050 Regional Policy Advisory Board; and Region 2050 Regional Technical Advisory Committee, *Environmental Resource protection in the Southern Willamette Valley Region 2050: Evaluating Region 2050 Alternative Futures*, March 2005, p. 2
- Wilson, Alex, "Small is Beautiful: U.S. House Size, Resource Use, and the Environment" (http://www.green-biz.com/sites/greenerbuildings/news_detail.cfm?NewsID=28392; compare this with "Housing Trends" later in this same section)
- Landis, John; Hood, Heather; and Amado, Chris, "The Future of Infill Housing in California," in *Frameworks: What's the Plan? 6 Visions for the Future of Urban Design*, A Publication of the University of California, Berkeley College of Environmental Design, Spring 2006, p. 14
- Srikameswaran, Anita, "Studies Find Walkable Communities are Healthier," *Pittsburgh Post-Gazette*, August 29, 2003 Walkable Communities (http://www.walkable.org/); also see American Journal of Public Health (http://www.ajph.org/) and the American Journal of Health Promotion (http://www.healthpromotionjournal.com/)
- 19 Calthorpe Associates, Envision Utah and Fregonese Calthorpe Associates, *Envision Utah: Producing a Vision for the Future of the Greater Wasatch Area*, pp. 27-37
- 20 Median lot size:U.S. Census Bureau statistics: http://www.census.gov/const/C25Ann/malotsizesold.pdf
- Median house size: Wilson, Alex, "Small is Beautiful: U.S. House Size, Resource Use, and the Environment" (http://www.greenbiz.com/sites/greenerbuildings/news_detail.cfm?NewsID=28392)
- Landis, John; Hood, Heather; and Amado, Chris, "The Future of Infill Housing in California," in *Frameworks: What's the Plan? 6 Visions for the Future of Urban Design*, p. 14
- 23 http://www.city.vancouver.bc.ca/engsvcs/streets/design/enviro.htm

APPENDIX B: POSSIBILITIES FOR FUTURE RESEARCH

Alleys and Accessory Dwelling Units:

Martin, Michael, Learning from Alleys: The Back-Alley in the American Residential Landscape (Master of Landscape Architecture Thesis, University of Oregon, 1995)

Santa Cruz, City of, Accessory Dwelling Unit Planning Manual, 2003

Shim, Brigitte, and Chong, Donald, *Site Unseen: Laneway Architecture and Urbanism in Toronto* (Toronto: University of Toronto Faculty of Architecture, Landscape and Design, 2004)

Green Neighborhoods, Communities and Regions:

Calthorpe, Peter, *The Next American Metropolis: Ecology, Community, and the American Dream* (New York: Princeton Architectural Press, 1993)

Design Center for American Urban Landscape, Creating a Landscape in the Pleasure Creek Neighborhood (City of Blaine, Minnesota, December, 1999)

Girling, Cynthia, and Kellett, Ronald, Skinny Streets and Green Neighborhoods: Design for Environment and Community (Washington, D.C.: Island Press, 2005)

Hulse, David, Stan Gregory and Joan Baker, Willamette River Basin Planning Atlas: Trajectories of Environmental and Ecological Change (Corvallis: Oregon State University Press, 2002)

Van der Ryn, Sim, and Calthorpe, Peter, Sustainable Communities (San Francisco: Sierra Club Books, 1986)

Smart Growth, Compact Growth, New Urbanism and Infill Development:

Beazley, Elizabeth, *Design and Detail of the Space Between Buildings* (London: Architectural Press, 1960) *Congress of New Urbanism Principles*

Eugene, City of, Planning and Development Department, *Mixed-Use Development in Eugene: Design Principles for More Livable Neighborhoods*

Girling, Cynthia and Helphand, Kenneth, Yard, Street, Park: The Design of Suburban Open Space (New York: John Wiley & Sons, Inc., 1994)

Kelbaugh, Doug, ed. The Pedestrian Pocket Book (New York: Princeton Architectural Press, 1989)

Lowe, Allen; Brokaw, Greg, AlA; Rowell, John, AlA; et al, Chambers Reconsidered: A Citizens' Guide to Potential Design Guidelines for a Mature Neighborhood, June 30, 2005