BACKGROUND INFORMATION:

This memorandum presents a menu of land use efficiency measures that may allow Springfield to increase residential density within the city’s existing Urban Growth Boundary. It also discusses the importance of these efficiency measures and provides graphic examples of depictions of a range of densities. The discussion of each measure includes a description of the policy, what its intended effects are, and a discussion of how to evaluate, or if possible, estimate, each measure’s impact on land holding capacity. This document is not intended to provide an in-depth discussion of policy language or how to implement and administer specific policies.

This memo divides measures which have not been implemented from those which are in practice in Springfield. Where efficiency measures are already in place, the question is whether additional effort is needed. The land use efficiency measures to be considered are shown in the table below. The online survey that will be provided by staff will allow you to express your support or concerns about the potential implementation of these measures or modification of those already in place.

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**Potential Efficiency Measures Not Yet Utilized In Springfield**

- Provide density bonuses for developers as an incentive to achieve certain community planning goals.
- Establish a mechanism for the transfer/purchase of development rights in exchange for the protection of farm and forest land.
- Mandate maximum lot sizes
- Mandate minimum residential density in low density residential zones
- Implement a process to expedite plan and permit approval for projects that achieve certain community planning goals

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**Efficiency Measures In Place in Springfield that may be Improved**

- Reduce street width standards
- Allow small residential lots
- Encourage infill and redevelopment
- Encourage the development of urban centers and urban villages (Nodal Development)
- Allow mixed-use development
- Encourage transit-oriented design
- Downtown revitalization
- Permit accessory dwelling units in single-family zones
- Permit multi-family housing tax credits to developers
- Allow clustered residential development
- Allow co-housing
- Increase allowable residential densities
- Allow duplexes, townhomes and condominiums in single-family zones
WHY ARE LAND USE EFFICIENCY MEASURES IMPORTANT?:

Oregon’s land use planning program was established to provide a balance of needs, including protecting farm and forest land, while also planning for organized urbanized growth. The purpose of reviewing land use efficiency measures is to explore ways of accommodating needed population growth within the existing urban growth boundary, prior to any effort made to expand the urban growth boundary (UGB). This is a requirement of Oregon Revised Statute (ORS) 197.296.

Oregon’s land use planning program began in 1973 after the Oregon Senate passed Senate Bill 100, which established the Land Conservation and Development Commission (LCDC). The Commission then established Oregon’s Statewide Planning Goals. These Goals address different needs. For example, Goal 14 was established to guide orderly development of urban level development through UGBs. Goal 3 and Goal 4 were created to conserve agricultural and forest lands. Part of the balance between conserving agriculture and forest land and accommodating urban growth is the process of reviewing land use efficiency measures. Land use efficiency measures can help accommodate population growth, while also conserving resource lands needed to serve both existing and future population.

Agriculture and forestry are key components to Oregon’s economy. In 2003, according to the latest data from the Oregon Department of Agriculture, farms in Oregon generated about $3.8 billion in gross sales. With value-added processing and sales of farm-related goods and services, the total direct contribution by agriculture and food processing industries to Oregon's economy is about $9.2 billion. (DLCD website - http://www.oregon.gov/LCD/farmprotprog.shtml). With regards to forestry, Oregon is the nation’s leading timber producer, producing approximately 15% of the nation’s total production for both lumber and panel board, according to 1994 estimates. (APA, OAPA White Paper, Grishkin, Justin, 2004). Springfield’s population continues to increase, requiring land and resources for development. Preliminary findings of the Springfield Residential Lands Study indicate that there is a need to accommodate for population growth within the next 20 years. The rapidly increasing cost and decreasing supply of natural resources coupled with the potential effects of climate change are all factors that may increase the need, desire and market for higher density development.

Over the years, Springfield has adopted many land use efficiency measures to better accommodate population growth within its existing UGB. Some of these measures are discussed in this document, as well as potential new efficiency measures that can be adopted.

WHAT DOES DENSITY LOOK LIKE?:

Density takes on many appearances, much of which depends on the design of the structures. The Lincoln Institute of Land Policy provides a webpage that provides a photo gallery as well as an interactive exercise that allows a person to visualize density through designing a neighborhood. In addition to the photos provided in this document, the Lincoln Institute’s webpage provides more visuals of what density looks like. In order to view the webpage, register with the Lincoln Institute online at: http://www.lincolninst.edu/subcenters/VD/index.aspx. Once you have registered, click on “Building Blocks: A Density Game” on the left hand side of the page in order to begin the interactive game. Explore the webpage to find out other information about density.

The photos below provide an illustration of what density looks like in different areas. The photos provide an example of the amount of land which is used by varying densities. Other photos and diagrams are presented throughout this document to provide examples of density as related to different efficiency measures.
Eugene, OR. – 54 units per net acre

Eugene, OR. – 68 units per net acre

Longmont, CO. – 12.3 units per net acre

Hayward, Ca. – 27.7 units per net acre

Palos Verdes, CA – 3.6 units per net acre

Brooksville, FL. – 4 units per net acre
### Potential Efficiency Measures not yet utilized in Springfield

- **Provide Density Bonuses to Developers**

#### Possible Amenities and Planning Goals to be Leveraged with Density Bonuses

<table>
<thead>
<tr>
<th>Possible Uses</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Amenities provided in exchange for a density bonus:</td>
<td>The local government allows developers to build housing at densities higher than are usually allowed by the underlying zoning. Density bonuses are used as an incentive to achieve community planning goals. They are also used as a tool to encourage greater housing density in desired areas, provided certain requirements are met. This policy is generally implemented through provisions of the local zoning code and is allowed in appropriate residential zones. To be most effective, there must be a strong market for high density residential development that cannot be achieved without the bonus. An example of the use of density bonuses in a smaller sized Oregon town can be found in Ashland, Oregon. The City of Ashland uses density bonuses through its “Earth Advantage” program as an incentive to encourage energy conservation measures in new construction. The program allows for a 15 percent density bonus if conservation measures are installed in homes.</td>
</tr>
<tr>
<td>◦ affordable housing;</td>
<td><strong>Implemented in Springfield? No.</strong></td>
</tr>
<tr>
<td>◦ housing for people with special needs;</td>
<td>Low density residential developments are averaging about 5 units per acre on flat land. The Development Code allows up to 10 units per acre in low density residential zones without bonuses.</td>
</tr>
<tr>
<td>◦ child care facilities;</td>
<td>Springfield’s medium density (10-20 units per acre) and high density residential (20-30 units per acre) districts are currently building out below the maximum density allowed without bonuses. However, more recent developments such as the new Royal Building in downtown Springfield are illustrations of much higher densities working in Springfield.</td>
</tr>
<tr>
<td>◦ underground parking;</td>
<td>Potential Benefits: Bonuses can increase densities in urban areas and create an incentive for providing neighborhood amenities. They can also be used as receiving zones to preserve resource lands by buying or transferring development rights from rural to urban areas.</td>
</tr>
<tr>
<td>◦ waterfront walkways;</td>
<td>Other Planning Goals: Can be used to preserve nearby open space that is vulnerable to development.</td>
</tr>
<tr>
<td>◦ open spaces, public plazas and fishing piers;</td>
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<tr>
<td>◦ landscaping;</td>
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<tr>
<td>◦ preservation of historic structures;</td>
<td></td>
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<tr>
<td>◦ preservation of sensitive and/or unique environmental areas</td>
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<tr>
<td>◦ guide development to preferred locations</td>
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</tbody>
</table>

Multifamily housing – Eugene, OR.
This student housing complex at the University of Oregon represents well designed units at increased density.

Scale of Impact: Moderate to large. Depending on the type and amount of bonus, this approach can result in densities of 200% or more of allowable density.

Estimating Impacts: Theoretical impact can be estimated by comparing actual densities measured in the underlying zone with theoretical density based on allowable density bonuses. This approach, however, will probably overestimate impacts since developers may choose to use less than the full density bonus. A case study approach that evaluates impacts in cities with similar policies can provide some indication of the level of impact.

Data Sources: Interviews with local developers; data from cities with similar policies.

Ease of Implementation:
- Technical — Moderate to difficult. Policies need to be written with clear guidelines so developers can easily understand when they are eligible for bonuses and to what extent they can increase densities.
- Political — Moderate. Increased density may be unpopular with existing residents. Could be perceived as a windfall for developers.
- Market — Moderate. There must be a market demand for denser single-family housing.

Applicability: Large fast growing; Small fast growing.

Conditions for Success: Market demand for high-density residential housing.
**Transfer/Purchase of Development Rights**

**Description:** This policy is intended to move development from sensitive areas to more appropriate areas. Development rights are transferred to “receiving zones” and can be traded. This policy can increase overall densities. This policy is usually implemented through a subsection of the zoning code and identifies both sending zones (zones where decreased densities are desirable) and receiving zones (zones where increased densities are allowed).

**Implemented in Springfield? No.**  
Density transfers require a market for high density development in the “receiving zone.” Like density bonuses, they only work well where there is a demand for high density development that cannot be achieved without the bonus (a transfer of additional density). At the present time, desired densities can largely be achieved in Springfield without the use of bonuses. However, the market for higher densities could change over the planning period (next 20 years). Limitations on density, particularly in medium density and high density residential zoning districts, seem to currently relate to the construction costs and perhaps the height limitations on apartment buildings.

**Potential Benefits:** These techniques can protect rural resource lands and reduce sprawl outside Urban Growth Areas (UGAs). They also may be used to protect critical areas while still allowing development on lots that contain unbuildable areas. They encourage the more efficient use of land and promote densities where they can be provided most cost effectively.

**Other Planning Goals:** Can be used to preserve nearby open space, including farmland and forests. Can also be used to mitigate development in areas where natural hazards exist.

**Scale of Impact:** Small to moderate. Actual impact will depend on the extent to which the policy is used. TDRs may have little impact on overall densities since overall density is not changed; rather it is moved around. TDRs can be used to encourage higher density development in selected areas.

**Estimating Impacts:** Identify allowable capacity in sending areas. Estimate actual density of development in sending areas by comparing observed densities in similar
Possible Uses of Transfer Development Rights (TDR)

**Possible Uses**

Preservation of:
- Farmland
- Grazing land
- Timber land
- Open space
- Critical habitat
- Historic buildings and districts

Increasing densities may be a secondary objective in some TDR ordinances. In these instances, it will be important to document how the TDR achieves the primary objectives (i.e., preserving critical natural areas, preventing development in hazardous areas, etc.). An inventory of such resources in sending zones should support justification for the TDR.

**Data Sources:** Local zoning and GIS data. Expert interviews. Case studies of comparable cities.

**Ease of Implementation:**

- **Technical — Difficult.** Transfer of development rights involves complex transactions at both ends.

  - **Political — Difficult.** While the general population may be supportive of a transfer, individual landowners may be unwilling to cooperate.

  - **Market — Moderate.** Property owners will need to be fairly compensated for land transfers.

**Applicability:** Large cities, urban areas that have critical natural areas or areas of known natural hazards.

**Conditions for Success:** A variety of land types available for sale, and availability of appropriate “receiving zones.”
## Mandate Maximum Lot Sizes

### Description:
This policy places an upper limit on lot size and a lower limit on density in single-family zones.

### Implemented in Springfield? No.
There currently is no mandate of maximum lot sizes in Springfield in the Low Density Residential (LDR) zone. This measure has potential for increasing efficiency of land use in Springfield. For example, Springfield has a 4,500 sq. ft. minimum lot size in its low density residential zone. If an 8,000 sq. ft. maximum lot size was established, the effective net density range in Springfield would be between 5.4 and 9.7 dwelling units per net acre. This would not allow large lot partitions or subdivisions (for example, dividing a 10 acre parcel into 10 separate one acre lots).

### Potential Benefits:
Ensures minimum densities in residential zones by limiting lot size. Places limits on building at less than maximum allowable density. Maximum lot sizes can promote appropriate urban densities, efficiently use limited land resources, and reduce sprawl development.

### Other Planning Goals:
Can reduce cost of delivering urban services to very low-density neighborhoods.

### Scale of Impact:
High. The actual impact depends on the amount of underbuild observed in single-family residential zones.

### Estimating Impacts:
Calculate minimum density based on maximum lot size. Estimate the number of units historically developed at less than the minimum density. Calculate the number of units per gross acre difference between historical densities and densities required under the maximum lot size standards. Calculate the additional number of dwelling units that could be accommodated based on the increased density and the number of buildable acres in the zoning district.

### Data Sources:
Data from the land supply monitoring report, local GIS data.

### Ease of Implementation:
**Technical — Easy.** This would require a modification to existing zoning codes. Application of the policy would be completed at the time of development review.

**Political — Moderate.** Some landowners may feel that the regulation restricts their ability to develop their property in the manner they choose.

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### Jasper Meadows: Phases 3 and 4, Springfield
- **Density:** 8.4 dwelling units per net acre
- **Average Lot Size:** 5,164 sq. ft.

### Filbert Meadows, Springfield
- **Density:** 6.7 dwelling units per net acre
- **Average Lot Size:** 6,500 sq. ft.

Jasper Meadows and Filbert Meadows are typical of recently developed subdivisions on relatively flat ground. The average lot sizes for each development are well below the 8,000 sq. ft. suggested maximum lot size noted at the beginning of this section. Some individual lots are as large as 10,000 sq. ft. on the periphery of the developments where further division was not possible. Establishing a “maximum average lot size” may allow a few odd lots to exceed the maximum while keeping with the intent of the concept.
Setting maximum lot sizes may be practical for flat ground, but steeper slopes require larger lots for proper engineering and safe development.

<table>
<thead>
<tr>
<th>Market — Easy to Moderate: Depends on the local demand for large lots.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applicability:</strong> All urban areas</td>
</tr>
<tr>
<td><strong>Conditions for Success:</strong> Residential zones where substantial underbuild exists.</td>
</tr>
</tbody>
</table>
**Mandate Minimum Residential Density in LDR Zone**

*Description:* This policy is typically applied in single-family residential zones and places a lower limit on density. Minimum residential densities in single-family zones are typically implemented through maximum lot sizes. In multiple-family zones they are usually expressed as a minimum number of dwelling units per net acre. Such standards are typically implemented through zoning code provisions in applicable residential zones.

*Is it implemented in Springfield? No.*

The Springfield Development Code sets minimum densities for medium (MDR) and high density (HDR) residential zones (*SDC 3.2-210*), but not for LDR zones. In the MDR zone, the minimum density is 10 units per developable acre. In HDR the minimum is 20 units per developable acre. A developable acre excludes public property, parks and dedicated streets, but includes open space and common areas that are reserved for the use of residents in a development.

*Potential Benefits:* This policy increases land holding capacity. Minimum densities promote developments consistent with local comprehensive plans and growth assumptions. They reduce sprawl development, eliminate underbuilding in residential areas, and make provision of services more cost effective.

*Other Planning Goals:* They promote a more consistent neighborhood fabric, reduce street costs, create areas with a more pedestrian scale, and are more transit-friendly. A minimum of 12 dwelling units per acre is required to support transit.

*Scale of Impact:* Moderate to large. The actual impact depends on the observed amount of underbuild and the minimum density standard.

*Estimating Impacts:* Calculate historic densities for each zone. Subtract historic density from minimum density required under the new standard. Apply difference to the number of buildable acres to estimate the minimum impact of the new density standard.

*Data Sources:* Land supply monitoring data, local GIS data.

*Ease of Implementation:* 

**Technical — Easy.** This would require a modification to existing zoning codes. Application of the policy would be completed at the time of development review.
**Political — Moderate.** Some developers may feel that the regulation restricts their ability to develop their property in the manner they choose.

**Market — Easy to Moderate:** Depends on the local demand for large lots.

**Applicability:** All cities.

**Conditions for Success:** Significant underbuild in residential zones. Setting minimum densities higher than the market will bear can result in slower rates of residential development or shifting of development to other cities.
### Implement A Process To Expedite Plan And Permit Approval For Smart Growth Projects

**Description:** Streamlined permitting processes provide incentives to developers. This policy would be implemented at the development review phase.

**Is it implemented in Springfield?: No.** Springfield currently has a general expedited procedure for an increased payment by the developer, but does not have a policy in place to specifically expedite plan and permit approval for smart growth projects. This measure would be incentive based to the developer instead of regulatory.

**Potential Benefits:** Can help direct the type and location of growth. Can also facilitate smart growth in markets where conditions are marginal for success.

**Other Planning Goals:** Smart growth addresses a variety of other planning goals: reduced reliance on autos, mixed-use development, higher densities are a few.

**Scale of Impact:** Small to moderate. The permitting process is one step in the overall development process, but does not affect density.

**Estimating Impacts:** The key indicator for this evaluation is the rate of permit approval for smart growth projects. This is primarily a monitoring issue, but interviews with developers and realtors can provide an indication of the level of interest in an expedited permitting process.

**Data Sources:** Interviews with realtors and developers.

**Ease of Implementation:**

**Technical — Easy to moderate.** The ease of implementation will depend on the process and types of projects.

**Political — Easy to moderate.** Expediting permitting can be controversial because it favors some types of development over others.

**Market — Moderate to difficult.** Expedited permitted many not be sufficient incentive to spur smart growth type development.

**Applicability:** All urban areas

**Conditions for Success:** Suitable sites for smart growth developments; market conditions that support smart growth; political support.

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**Fairview Village**

Fairview Village is an example of a “smart growth project” that has been developed in Oregon. Fairview Village is a mix of houses, rowhouses, and apartments built among retail, office, and other civic amenities.

**Fairview Village has received the following awards:**
- Oregon Governor’s Livability Award – Oregon
- 1000 Friends of Oregon – Builders Award
- 2001 National Association of Home Builders – “Best Smart Growth Community in the U.S.” Gold Award

**WHAT IS SMART GROWTH?**

- More quality affordable housing, especially for people of low- and very-low incomes
- Alternatives to driving alone, including cost-effective, available, affordable public transit service and neighborhoods where residents can safely walk and bike
- Revitalization of under-utilized city and suburban centers, especially in transit-rich areas, without displacement of existing residents
- Ensuring social equity, environmental protection, and economic viability
- Promoting compact, infill, transit-oriented, mixed-use and mixed-income development
- Locating quality jobs in areas of existing work force housing, and along major transportation lines and hubs

Existing Efficiency Measures in Springfield with Potential for Improved Efficiency

- Reduce Street Width Standards

Narrow street design can reduce traffic speeds and increase livability in local neighborhoods. Reducing street widths on collectors and arterials is not recommended.

**Description:** This policy is intended to reduce land used for streets and calm traffic. Street standards are typically described in development and/or subdivision ordinances. Reduced street width standards are most commonly applied on local streets in residential zones. Narrower streets also have the benefit of reducing stormwater runoff; less maintenance cost, etc.

**Is this implemented in Springfield?:** Partially.

The Springfield Development Code requires a minimum local street width of 36 feet (curb to curb) for streets with a slope of less than 15%. On steeper slopes the minimum width is reduced to 28 feet.

**Things to keep in mind:**

- Streets wider than 28 feet are NOT, by definition, a “narrow street.”
- Two-way streets under 20 feet are NOT recommended. If, in a special circumstance, a community allows a street less than 20 feet, safety measures such as residential sprinklers*, one-way street designations, and block lengths less than 300 feet may be needed.

The “Neighborhood Street Design Guidelines,” published by the Oregon Transportation and Growth Management Program (TGM) provides guidelines for narrow street design. This guidebook is available online at: [http://www.lcd.state.or.us/LCD/docs/publicatio](http://www.lcd.state.or.us/LCD/docs/publicatio)
Example of a 28-ft Wide Street with Parking on Both Sides

Narrow street designs may conflict with emergency service requirements. These conflicts can often be resolved through cooperative planning with the fire department.

Example of a 24-ft Wide Street with Parking on One Side

Narrow street designs may require cars to yield to one-another between parked cars.

Potential Benefits: Narrower streets make more land available to housing and economic-based development.

Other Planning Goals: They calm neighborhood traffic and increase livability. They are more pedestrian friendly, enhance the sense of neighborhood, and can lower capital and maintenance costs.

Scale of Impact: Moderate. Land used for streets and other public facilities ranges from 15% to 30% or more depending on the type of development. Narrow streets can reduce land used for streets by 25% resulting in a decrease 5%-10% in total land consumption.

Estimating Impacts: Estimate linear street distance and area per acre based on observations in existing development. Apply new street standard to estimate street area per acre and land available for residential development. Calculate net density (du/net acre) based on new street width standard.

Data Sources: Local GIS data.

Ease of Implementation: Technical — Moderate. Emergency service providers frequently have concerns with access on narrow streets.

Political — Easy to moderate. Although some residents may resist a change to narrower streets, having become accustomed to wide streets.

Market — Easy. Narrow streets do not appear to be a major demand factor.

Applicability: All urban areas

Conditions for Success: Wide local street standards; ability to address emergency access concerns.
### Allow Small Residential Lots

**Description:** Small residential lots are generally less than 5,000 sq. ft. Small lots can be allowed outright in the minimum lot size and dimensions of a zone, or they could be implemented through the subdivision or planned unit development ordinances.

**Is this implemented in Springfield?:** Partially

Springfield’s minimum lot size ranges between 4,500 and 5,000 sq. ft., depending on the direction of the street. This is considered a small lots by many jurisdictions. However, there are other jurisdictions such as Portland and Eugene that allow smaller lots, some as small as 3,500 square feet.

**Potential Benefits:** This policy is intended to increase density and lower housing costs. Small lots limit sprawl, contribute to the more efficient use of land, and promote densities that can support transit. Small lots also provide expanded housing ownership opportunities to broader income ranges and provide additional variety to available housing types.

**Other Planning Goals:** Small lots provide another housing option for changing demographics. They preserve affordable options for local residents to downsize and stay in the neighborhood as they age, and for new residents seeking more compact living quarters.

**Scale of Impact:** Small to moderate.

Cities have adopted minimum lot sizes as small as 3,000 sq. ft. However, it is uncommon to see entire subdivisions of lots this small. Small lots typically get mixed in with other lot sizes.

**Estimating Impacts:** Estimate increases in net density based on flexible minimum lot size using data from comparable cities or by estimating the number of small lots and the impact on net densities.

**Data Sources:** Observed densities in similar zones; case studies of comparable cities.

**Ease of Implementation:**

- **Technical — Easy.** Increased density standards are simple to implement—the standards would be applied at the development review phase.

- **Political — Moderate.** Increased density standards may be politically unpopular with existing residents.

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**“Edwards Addition” (Eric Olsen Developer) Monmouth, Oregon**

**Edwards Addition-- Master Plan**

- 470 units total, 60 built as of June 2005
- Mix of single family, town homes and apartments and accessory dwelling units
- Houses range from 700-3,000 square feet
- Density: 7 dwelling units per acre
- Lots range from 2,000-10,000 square feet

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*People don’t buy ideas, they buy what’s there. I had to show the community what smart development was.*

– Eric Olsen

*Olsen Design & Development*
Market — Easy. More varied housing options provides a greater diversity of housing stock to home buyers.

Applicability: All urban areas

Conditions for Success: Demand for affordable housing, housing designs that work on small lots.

Hoerauf Subdivision – Springfield, OR.
Average lot size = 5,360 square feet
Smallest lot = 4,536 square feet
**Encourage Infill and Redevelopment**

**Infill development** has been effectively used by NEDCO and Habitat for Humanity to provide homeownership opportunities for low income persons.

![Meyer Park project, 49th and Main St., Springfield (Habitat for Humanity)](image)

**Description:** This policy seeks to maximize use of lands that are fully-developed or underdeveloped. Make use existing infrastructure by identifying and implementing policies that (1) improve market opportunities, and (2) reduce impediments to development in areas suitable for infill or redevelopment.

**Is this implemented in Springfield?:** Partially

Many of the efficiency measures described in this document have been adopted by Springfield to encourage infill and redevelopment. However, as described throughout this document, additional measures can be adopted as well as improving existing ones. For example, panhandle lots are permitted in Springfield, which allow for better infill opportunities. Springfield has also adopted Urban Renewal Districts in both Glenwood and Downtown which encourage redevelopment.

**Potential Benefits:** Can reduce sprawl development by reusing land within developed areas and where services are already provided, contributing to more efficient use of land. Infill and redevelopment can increase density of development, but do not always have that effect.

**Other Planning Goals:** Infill can achieve a number of community objectives, such as redevelopment of blighted areas, creation of a vital and viable business district, increased housing densities, and broader shopping opportunities.

**Scale of Impact:** Small to moderate.

Scale of impact depends on the amount of land available for infill.

**Estimating Impacts:** It is best to estimate the impacts of infill and redevelopment sites separately. For infill, begin with an inventory of infill sites. Estimate development potential (in terms of jobs and dwelling units) on land available for infill based on observed densities in the underlying zone.

Identify opportunity sites and compare existing density with potential densities. Calculate density before and after redevelopment. Develop rate and density assumptions for redevelopment by zone.

**Data Sources:** Local building permit data, local GIS data, interviews with local realtors and developers.
Partition approved in Springfield, OR. to facilitate infill development for NEDCO.

Ease of Implementation:

Technical — Easy. Policies would be implemented at time of development review.

Political — Moderate. Infill can be controversial due to perceptions of impacts to existing neighborhoods. Redevelopment could affect existing land uses.

Market — Moderate to difficult. Infill and redevelopment is generally more expensive than developing green fields. Cities with large inventories of buildable lands will find infill and redevelopment more challenging and may need to consider incentives.

Applicability: All urban areas

Conditions for Success: Inventory of infill and/or redevelopable sites. Market conditions that are conducive to redevelopment. Incentives that encourage redevelopment.
Encourage the Development of Urban Centers and Urban Villages (Nodal Development)

Description: An urban center or urban village provides mixed uses with a development. The Eugene-Springfield Metro Plan and TransPlan identify these villages as “nodes”.

Residents are near retail establishments, parks, schools, and other urban amenities. The goal of urban centers and villages is to create integrated, more complete, and inter-related neighborhoods. Such concepts are often implemented through specific area or downtown plans and may require public investment.

Is this implemented in Springfield?: Partially

Springfield currently has 2 nodal development areas designated on the Metro Plan Diagram; two additional areas which have been partially implemented through development review; and 11 additional areas which are designated on the TransPlan Map as “potential nodal areas.” These additional areas have yet to be formally designated.

Potential Benefits: These centers and villages provide locally-focused shopping opportunities and urban amenities together with increased densities which increase livability and reduce the dependence on autos. They are a more efficient use of land, encourage more transportation or mobility options (due to connected streets), and provide for urban services more cost-effectively. These are in stark contrast to stand-alone tracts of single-use developments that are not related to nor connected to the rest of the community or adjacent neighborhoods.

Other Planning Goals: They reduce the need to drive for basic services and shopping.

Scale of Impact: Large. Urban centers can create higher densities within the centers, and may also create incentive for higher densities on adjacent lands.

Estimating Impacts: The first step is to inventory acres in the Nodal Development (ND) designation. The next step is to estimate density build-out in designated nodes. Then, identify additional potential development sites and estimate density accommodation opportunities. Lastly, the review of policies and zoning regulations takes place.
Data Sources: Local policies and zoning regulations; case studies; housing/employment split and density assumptions.

Ease of Implementation:

Technical — Difficult. Development of urban centers requires considerable planning and public involvement processes. In some cases, it may require partial public subsidy to encourage redevelopment in pioneer (new emerging) markets and neighborhoods.

Political — Moderate. Because it can be technically difficult to achieve, developers may resist investing in this type of development. Moreover, local decision makers must support public investments.

Market — Easy to Moderate. Existing urban center developments have sold well in residential markets, but have had more difficulty filling retail space.

Applicability: All urban areas

Conditions for Success: Substantial investment in planning efforts. Possible public investment in infrastructure and other elements to encourage private development.
Allow Mixed Use Development

The Royal Building has 33 apartments over ground-level commercial space.

Broadway Place, Eugene, OR.

With current policies in place, some mixed-use developments (like Broadway Place) require public subsidies.

**Description:** Mixed-use zoning allows a mix of compatible uses (usually small scale commercial and multi-family residential) within a single zone. Mixed uses can be vertical (i.e., multiple uses within a single building) or horizontal (i.e., multiple uses in a given geographic area).

**Is this implemented in Springfield?** Yes.

Springfield currently has areas of the City which are designated and zoned for mixed use. The Springfield Development Code established the Mixed Use Commercial; Mixed Use Employment; and the Mixed Use Residential Districts. Additional areas of the City have the potential to be designated for mixed use development.

**Potential Benefits:** This technique can provide a broader variety of housing options, allowing people to live, work, and shop in nearby areas. Mixed uses in the same area encourage more pedestrian and transit-friendly access, reduce the demand on transportation services and facilities, make goods and services accessible to non-drivers, and reduce peoples' dependence on vehicles for mobility.

**Other Planning Goals:** Mixed use development can reduce automobile trips by creating shopping and employment opportunities in closer proximity to housing and is an attractive option for empty nesters, the elderly and persons with disabilities.

**Scale of Impact:** Small to moderate. Higher density is one objective of mixed-use development, but not the primary objective.

**Estimating Impacts:** The first step is to inventory acres in the mixed-use designation. The next step is to review policies and zoning regulations that govern the vision for the area and specific uses and densities. The output of this exercise should be an estimate of the residential/employment split in the area, and assumptions about residential and employment densities which can then be used to estimate land holding capacity.

**Data Sources:** Local policies and zoning regulations; case studies; housing/employment split and density assumptions.

**Ease of Implementation:**

**Technical — Moderate to difficult.**

Development of a mixed-use zone is relatively easy, but developing a comprehensive set of policies to implement a successful mixed-use district, to determine
Crescent Village in Eugene is proceeding without any public subsidy, as is the Tate Building.

Political — Moderate. Residents may resist mixed-use development in areas that are already developed. May be perceived as a windfall to developers.

Market — Moderate. Mixed-use development is becoming more widely accepted and common. Mixed-use development can be difficult in the face of market conditions and in some cases may require public subsidy or other incentives.

Applicability: Larger communities; areas with larger tracts of land; areas where redevelopment or revitalization is desired; downtowns and/or along transit corridors.

Conditions for Success: Public support, demand for a variety of housing types, design that integrates uses in an appropriate manner.

Crescent Village provides both a vertical and horizontal mix of uses, with apartments over ground-level commercial space and nearby townhomes that are integrated into the development.
• Encourage Transit-Oriented Design

**Description:** The goal of transit-oriented development is to create development patterns that complement transit. Transit-oriented development allows people to more easily use transit systems and helps businesses near transit stations be more accessible. When done well, the result will be desirable urban neighborhoods.

**Is this implemented in Springfield?:** Partially

Lane Transit District (LTD) recently developed the new LTD Bus Station in downtown Springfield. As well, LTD has finished the first phase of the EmX route through Glenwood, and is planning the second phase along Pioneer Parkway. These improvements in public transportation will support transit-oriented developments. The potential for new Nodal Development areas as designated in the TransPlan could also encourage transit-oriented design. Designating higher densities along the EmX route and other LTD bus routes would also increase transit oriented development. As an example, large portions of land adjacent to Pioneer Parkway are still designated LDR, but have the potential to be designated at increased densities.

**Potential Benefits:** Transit allows denser development with less traffic congestion, reduces dependence on single occupancy vehicles (SOV), and provides transportation options for broader segments of the population who cannot drive (elderly, disabled, children, low-income without vehicles, etc.).

**Other Planning Goals:** Can reduce the number of car trips.

**Scale of Impact:** Moderate to large. Like mixed-use development, transit-oriented development is intended to result in higher density development that supports transit. Transit-oriented development can result in higher densities than would otherwise be expected.

**Estimating Impacts:** The first step is to inventory acres in the Nodal Development (ND) designation. The next step is to review policies and zoning regulations that govern the vision for the area and specific uses and densities. The output of this exercise should be an estimate of the residential/employment split in the area, and assumptions about residential and employment densities which can then be used to estimate land holding capacity.
**Data Sources:** Local policies and zoning regulations; case studies; housing/employment split and density assumptions.

**Ease of Implementation:**

**Technical — Difficult.** Transit-oriented design requires coordinated planning and implementation on a relatively large scale in urban areas. In some cases, property owners have formed Improvement Districts to fund transit improvements (e.g. Portland Streetcar).

**Political — Moderate.** Must support investment in transit.

**Market — Moderate to difficult.** Must be able to show market for mixed-uses and/or higher densities that are common with transit-oriented development. May require public investment. Requires risk sharing between public/private sector for pioneer markets/neighborhoods.

**Applicability:** Urban areas with transit systems

**Conditions for Success:** Strong transit system; vacant or redevelopable land near transit stations.
• Downtown Revitalization

**Description:** Downtown revitalization includes redevelopment of blighted areas, developing a viable business district, and improving retail opportunities.

**Is this implemented in Springfield?:** Partially

Springfield recently established a Downtown Urban Renewal District, which provides the framework for downtown revitalization. The Royal Building is an example of downtown Springfield housing redevelopment. There is potential for much more redevelopment downtown.

**Potential Benefits:** It provides housing and employment options, reduces sprawl development by reusing land within developed areas and where services are already provided, increases economic opportunities, and contributes to more efficient use of land.

**Other Planning Goals:** Downtown revitalization can seek to achieve a number of community objectives: redevelopment of blighted areas, creation of a vital and viable business district, increased housing densities, and broader shopping opportunities are a few.

**Scale of Impact:** Moderate to large.

Combined with other policies, downtown revitalization efforts can potentially lead to significant increases in density.

**Estimating Impacts:** Estimating impacts of downtown revitalization efforts can be difficult. Many of the efforts may not directly relate to density. Some of the key factors in such an analysis would be to document vacancy rates and inventory sites targeted for redevelopment. Vacancy rates and redevelopment sites will allow an estimate of residential and employment capacity. Finally, the revitalization strategy will take time for implementation. A certain percentage of capacity should be allocated over the revitalization planning period.

**Data Sources:** Revitalization plan; vacancy rate; inventory of redevelopment sites; capacity assumptions.

**Ease of Implementation:**

**Technical — Difficult.** Many downtown revitalization efforts require substantial public investment without a clear guarantee of success.

**Political — Moderate.** While many members of the communities support the idea of a vital downtown, building political...
support to fund redevelopment can be difficult.

**Market — Difficult.** Throughout the country, downtowns have lost tenants to suburban malls and lifestyle centers. Powerful economic forces have contributed to the shift, and many firms may be uninterested in moving to a downtown.

**Applicability:** Communities with declining downtown areas

**Conditions for Success:** Broad community support.
• Permit Accessory Dwelling Units (ADUs) in single family zones

**Description:** Communities use a variety of terms to refer to the concept of accessory dwellings: secondary residences; “granny” flats; and single-family conversions, among others. Regardless of the title, all of these terms refer to an independent dwelling unit that shares, at least, a tax lot in a single-family zone. Some accessory dwelling units share parking and entrances. Some may be incorporated into the primary structure; others may be in accessory structures. Accessory dwellings can be distinguished from “shared” housing in that the unit has separate kitchen and bathroom facilities. ADUs are typically regulated as a conditional uses. Some ordinances only allow ADUs where the primary dwelling is owner-occupied.

**Implemented in Springfield? Partially (SDC 5.5-100)**

Accessory dwelling units are allowed in Springfield residential zones, except in the Washburn Historic District. While these are allowed, there has not been a high demand for constructing new accessory dwelling units in Springfield thus far.

**Potential Benefits:** Increases residential land holding capacity. Densities are increased within existing developed areas with minimal visual disruption.

**Other Planning Goals:** Accessory dwelling units provide another housing option for changing demographics. They preserve affordable options for local residents to downsize and stay in the neighborhood as they age, and for new residents seeking more compact living quarters. ADUs can also make better use of existing infrastructure.

**Scale of Impact:** Small. Communities that have adopted ADU ordinances have generally reported that few applications occur each year. **Springfield implemented an ADU ordinance in 2002. Ten ADU applications have been processed since the ordinance was adopted, or about two per year.** Moreover, single-family subdivisions may have CC&Rs that prohibit ADUs.

**Estimating Impacts:** Estimating impacts of an ADU ordinance require estimating the number of permits that will be issued annually. This is a function of two factors: (1) the
geographic extent of application of the ADU ordinance; (2) the specific requirements for approval of an ADU. Most cities that have ADU ordinances have not seen a lot of activity. For example, the City of Portland, Oregon received about 5 permits annually for the first several years after adopting its ordinance in 1981.

To calculate the impact, estimate the number of permits issued annually and multiply it by an average lot size assumption for a single-family dwelling (probably between 5,000 and 8,000 square feet). This can provide an upper boundary estimate of the amount of land saved by the ADU ordinance.

Data Sources: Use of ADU ordinances in nearby or comparable cities.

Ease of Administration:
Technical – Easy. Many model ADU ordinances exist and can easily be accessed through Web sites. ADUs would require land use applications and are typically subject to conditional use standards.

Political – Moderate. ADUs can be controversial due to perceptions of impacts to existing neighborhoods.

Market – Difficult. While demand exists for affordable housing in many cities, development of ADUs is typically initiated by property owners rather than developers. Because ADUs are developed one at a time, no economy of scale exists for developers.

Conditions for Success: Low density neighborhoods that do not have CC&Rs. These conditions typically exist in older neighborhoods. City policies must allow and encourage development of ADUs. Market for small, low-income housing.

Applicability: All urban areas.
Provide Multifamily Housing Tax Credits to Developers

Description: In some states, local governments can provide tax credits to developers for new or rehabilitated multifamily housing. Tax credits provide an incentive to developers by reducing future tax burden. In some markets, this can make projects financially feasible. This policy is intended to encourage development of multifamily housing, primarily in urban centers. This policy is primarily applicable in larger cities and is typically offered for projects that meet specific criteria.

Implemented in Springfield?
Partially.

In Oregon, the state allows for the formation of special districts that provide a partial tax exemption for mixed-use and affordable multifamily housing, called the “Vertical Housing Program.” Springfield established a Vertical Housing District in the downtown in 2005. Another program is available in the Portland area that provides tax benefits for multi-family mixed-use development along the light-rail “Max” line. The state allows local jurisdictions to establish special districts where state tax benefits can be used to leverage desired development.

Potential Benefits: This encourages increased and improved residential opportunities within urban centers where there is insufficient housing. It is intended to stimulate new multifamily housing construction as well as rehabilitation of existing vacant and under-utilized buildings for multifamily housing targeting both renters and owners.

Other Planning Goals: Multifamily units can provide affordable housing for low-income residents.

Scale of Impact: Small to moderate.
Successful cities in the Puget Sound Region typically facilitate fewer than 100 dwelling units per year using this policy. The Royal Building in Springfield has 37 units.

Estimating Impacts: Estimating the impact of this measure requires an estimate of frequency of use and the number of units affected. This will depend on several factors: (1) the amount of money available for tax credits; (2) the amount of the tax credits (i.e., the degree to which the credits provide incentive to develop multi-family housing versus other housing types); (3) the amount of multi-family housing being developed without

Royal Building, Springfield

The Vertical Housing Program encourages mixed-use commercial / residential developments in areas designated by communities through a partial property tax exemption. The exemption varies in accordance with the number of residential floors on a project with a maximum property tax exemption of 80 percent over 10 years. An additional property tax exemption on the land may be given if some or all of the residential housing is for low-income persons (80 percent of area median income or below). The Royal Building in Springfield benefited from this program.
<table>
<thead>
<tr>
<th>Data Sources:</th>
<th>Local multi-family tax credit programs (city or local housing authority); use of programs in nearby or comparable cities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Implementation:</td>
<td><strong>Technical — Moderate to Difficult.</strong> Tax incentives may not be sufficient incentive to attract development in some areas.</td>
</tr>
<tr>
<td></td>
<td><strong>Political — Moderate.</strong> Community residents may object to public dollars going to private developers. Neighbors may resist development of units due to perceptions of impacts to land values and characters in existing neighborhoods.</td>
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<tr>
<td></td>
<td><strong>Market — Easy to Moderate.</strong> In larger, fast growing communities, demand for affordable housing is likely to be high.</td>
</tr>
<tr>
<td>Applicability:</td>
<td>All urban areas</td>
</tr>
<tr>
<td>Conditions for Success:</td>
<td>Demand for affordable housing in markets where profitability of affordable housing is marginal.</td>
</tr>
</tbody>
</table>
Allow Clustered Residential Development

**Description:** Clustering allows developers to increase density on portions of a site, while preserving other areas of the site. Clustering is a tool most commonly used to preserve natural areas or avoid natural hazards during development. It uses characteristics of the site as a primary consideration in determining building footprints, access, etc. Clustering is typically processed during the site review phase of development review.

**Implemented in Springfield?** Yes. (SDC 4.7-100 and 3.2-230) Springfield utilizes cluster developments throughout the city, including within its Hillside Development Overlay District, where cluster developments may be built on slopes between 15 and 25% at higher densities in exchange for protecting open areas on steeper slopes. The density is limited to a maximum of 8 units per acre within the overlay district. By comparison, the Mountaingate development, a large subdivision in Springfield located on sloped lands, will probably achieve less than 3 units per acre. Other cluster developments have been built in Springfield including Fairhaven Subdivision and Ash Meadows. Some lots in these cluster developments have been as small as 3,500 square feet, but have been designed to fit into the character of the neighborhood.

**Potential Benefits:** Clustering may allow more efficient use of land in addition to providing open space. The technique also encourages a neighborhood feeling. It allows critical areas to be protected while still permitting both urban and rural development.

**Other Planning Goals:** Can be used to preserve particular tracts of land, creating open space or avoiding development in areas of critical natural resources or with natural hazards.

**Scale of Impact:** Moderate. Clustering can increase density, however, if other areas of the site that could otherwise be developed are not developed, the scale of impact can be reduced.

**Estimating Impacts:** Calculate the area (in acres) of lands where clustering is required or encouraged. Estimate overall density of development on the sites under the base zoning. Potentially make market adjustments for underbuild.

**Data Sources:** Local GIS data, expert
Ease of Implementation:

Technical — Easy. Clustering has commonly been used with site review or flexible design standards. Few Snohomish County communities have clustering policies.

Political — Easy. Clustering has few perceived negative attributes, and existing residents are unlikely to resist it.

Market — Easy. Cluster development tends to look different than tract housing, making them desirable in the housing marketplace.

Applicability: All urban areas

Conditions for Success: Flexible design standards, to allow and encourage creative development.
### Allow Co-Housing

<table>
<thead>
<tr>
<th>Description:</th>
<th>Co-housing communities balance the traditional advantages of home ownership with the benefits of shared common facilities and connections with neighbors. This approach would be implemented through the local zoning or development code and would list these housing types as outright allowable uses in appropriate residential zones.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implemented in Springfield?</td>
<td>Partially. While the Springfield Development Code does not specifically mention Co-housing, it does not preclude it from being developed. Essentially, co-housing can occur in Springfield through the development multi-family housing. Individual ownership of the units is established through the State.</td>
</tr>
<tr>
<td>Potential Benefits:</td>
<td>It provides another choice in a variety of housing options.</td>
</tr>
<tr>
<td>Other Planning Goals:</td>
<td>Can be used to preserve particular tracts of land, preserving open space. Can also be used as an affordable housing option.</td>
</tr>
<tr>
<td>Scale of Impact:</td>
<td>Small. While co-housing may be able to achieve multi-family housing densities, it is unlikely that this housing type would make up a large portion of new housing stock, thereby diminishing its impact.</td>
</tr>
<tr>
<td>Estimating Impacts:</td>
<td>Inventory areas where co-housing is allowed as an outright or conditional use. Make assumptions about the rate of co-housing development based on case study analysis, discussion with market experts, or previous trends. Estimate the amount of additional dwelling units created as a result of allowing co-housing.</td>
</tr>
<tr>
<td>Data Sources:</td>
<td>GIS inventory data, case studies of jurisdictions that allow co-housing.</td>
</tr>
<tr>
<td>Ease of Implementation:</td>
<td>Technical — Easy to moderate. Developing cohousing policies is relatively simple. Political — Moderate. Some communities have experienced political controversy when considering such ordinances. But to non-residents, the co-housing looks much like clustered developments.</td>
</tr>
</tbody>
</table>

**FrogSong Cohousing - Cotati, California**

*FrogSong is a community of 30 households located in Cotati, California, a small town roughly one hour north of San Francisco.*

**Trillium Hollow Cohousing – Portland, OR.**
Market — Difficult. Demand for co-housing is small, but may grow.

Applicability: All urban areas

Conditions for Success: Market demand for co-housing opportunities. Local policies and development ordinances that allow cohousing.
<table>
<thead>
<tr>
<th><strong>Increase Allowable Residential Densities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> This approach seeks to increase holding capacity by increasing allowable density in residential zones. It gives developers the option of building to higher densities. This approach would be implemented through the local zoning or development code.</td>
</tr>
<tr>
<td><strong>Implemented in Springfield? Partially.</strong> Springfield already allows up to 10 units per acre in its Low Density Residential (LDR) zone. Springfield’s medium density (MDR 10-20 units per acre) and high density residential (HDR 20-30 units per acre) zones allow higher densities but few developments have taken advantage of the densities already allowed. Development Code requirements may be impeding build out for MDR and HDR zones.</td>
</tr>
<tr>
<td><strong>Potential Benefits:</strong> Higher densities increase residential land holding capacity. Higher densities, where appropriate, provide more housing, a greater variety of housing options, and a more efficient use of scarce land resources. Higher densities also reduce sprawl development and make the provision of services more cost effective.</td>
</tr>
<tr>
<td><strong>Other Planning Goals:</strong> Smaller lots can yield more housing options for low-income residents.</td>
</tr>
<tr>
<td><strong>Scale of Impact:</strong> Moderate to high. The actual impact will depend on the amount of the density increase and the size of area upon which it is applied.</td>
</tr>
<tr>
<td><strong>Estimating Impacts:</strong> Calculate maximum allowable density for existing zoning and for increased densities. Make assumptions about densities under new density rules considering underbuild and market factors. Identify number of acres increased densities will be allowed on. Multiply assumed densities (in gross acres) by number of acres to estimate dwelling units. Subtract estimated number of dwelling units under old density standards to estimate increased productivity. In Springfield, analyzing impediments to build out in MDR and HDR would help with estimating impacts.</td>
</tr>
<tr>
<td><strong>Data Sources:</strong> Local GIS data. Data on historical densities and underbuild in residential zones.</td>
</tr>
<tr>
<td><strong>Ease of Implementation:</strong> Technical — Easy. Increased density standards are simple to implement—the standards would be applied at the development review phase.</td>
</tr>
</tbody>
</table>

**Design matters when increasing density:** These two neighborhood blocks couldn’t be more different, yet they have the exact same density of 11.7 units per acre.

**Multifamily housing – Eugene, OR.** These units were built for student housing at the University of Oregon. Similar design and layout could be used for other multifamily developments.
Political — Moderate. Increased density standards may be politically unpopular with existing residents.

Market — Easy. More varied housing options provides a greater diversity of housing stock to homebuyers.

Applicability: All urban areas

Conditions for Success: Market for higher density housing than can be achieved under existing standards, and potentially improved with adoption of new efficiency measures.
• Allow Duplexes, Townhomes and Condominiums in Single-Family Zones

Description: Allowing these housing types can increase overall density of residential development and may encourage a higher percentage of multi-family housing types. This approach would be implemented through the local zoning or development code and would list these housing types as outright allowable uses in appropriate residential zones.

Implemented in Springfield? Yes. (Duplexes – SDC 4.7-165; Condominiums – SDC 4.7-135; Townhomes – SDC 3.2-230)

Springfield allows duplexes, condominiums, and attached single family homes in its low density residential zone with conditions to ensure the compatibility of such housing types with the existing neighborhood.

Potential Benefits: These housing types can increase overall density of residential development. They provide additional affordable housing options and allow more residential units than would be achieved by detached homes alone.

Other Planning Goals: They provide options for changing demographics, allowing local residents to downsize their residences while staying in their communities as they age.

Scale of Impact: Small to moderate. Most jurisdictions already allow these housing types.

Estimating Impacts: Data from the land supply monitoring process should include these housing types. Conduct density analysis of existing duplexes, condominiums, and townhouses for a specified time period. Calculate net density and rate of development for these housing types. Estimate the amount of land available for these housing types and assume some future rate of development. Estimate difference between historical and estimated densities.

Data Sources: Local GIS data.

Ease of Implementation:

Technical — Easy. These housing types would be added to the list of outright allowable uses in appropriate zones.

Political — Moderate. Duplexes and townhouses can be be controversial due to perceptions of impacts to existing neighborhoods.

Market — Easy. Duplexes, townhouses, and condominiums can fill a market
demand for lower cost and smaller housing.

**Applicability:** All urban areas

Conditions for Success: Market for these housing types; local policies that allow or encourage development of duplexes, townhouses and condominiums.
ORS 197.296 requires cities to consider land use efficiency measures if the housing needs analysis finds that the City may not meet identified housing needs. Specifically, the statute states:

(6) If the housing need determined pursuant to subsection (3)(b) of this section is greater than the housing capacity determined pursuant to subsection (3)(a) of this section, the local government shall take one or more of the following actions to accommodate the additional housing need:

(a) Amend its urban growth boundary to include sufficient buildable lands to accommodate housing needs for the next 20 years. As part of this process, the local government shall consider the effects of measures taken pursuant to paragraph (b) of this subsection. The amendment shall include sufficient land reasonably necessary to accommodate the siting of new public school facilities. The need and inclusion of lands for new public school facilities shall be a coordinated process between the affected public school districts and the local government that has the authority to approve the urban growth boundary;

(b) Amend its comprehensive plan, regional plan, functional plan or land use regulations to include new measures that demonstrably increase the likelihood that residential development will occur at densities sufficient to accommodate housing needs for the next 20 years without expansion of the urban growth boundary. A local government or metropolitan service district that takes this action shall monitor and record the level of development activity and development density by housing type following the date of the adoption of the new measures; or

(c) Adopt a combination of the actions described in paragraphs (a) and (b) of this subsection.

(7) Using the analysis conducted under subsection (3)(b) of this section, the local government shall determine the overall average density and overall mix of housing types at which residential development of needed housing types must occur in order to meet housing needs over the next 20 years. If that density is greater than the actual density of development determined under subsection (5)(a)(A) of this section, or if that mix is different from the actual mix of housing types determined under subsection (5)(a)(A) of this section, the local government, as part of its periodic review, shall adopt measures that demonstrably increase the likelihood that residential development will occur at the housing types and density and at the mix of housing types required to meet housing needs over the next 20 years.