This appendix presents the menu of reasonable measures for jurisdictions to consider. 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 appendix is not intended to provide an in-depth discussion of policy language or how to implement and administer specific policies.

It is common for jurisdictions to adopt combinations of policies to manage growth and improve the efficiency and holding capacity of land uses. Such policy groupings, however, are not necessarily cumulative in their intent or impact. Policies that address similar issues may not be mutually reinforcing. For example, having policies in residential zones for maximum lot size and minimum density essentially address the same issue—underbuild in residential zones. Thus, communities should carefully consider their policy programs and evaluate each policy both individually and in consideration of other policies.

**MEASURES TO INCREASE DENSITY**

**MEASURES THAT INCREASE RESIDENTIAL CAPACITY**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Potential Benefits</th>
<th>Other Planning Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Accessory Dwelling Units (ADUs)</td>
<td>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.</td>
<td>Increases residential land holding capacity. Densities are increased within existing developed areas with minimal visual disruption.</td>
<td>Accessory dwelling units provide another housing option for changing demographics. They preserve affordable options for local residents to downsize and stay in the</td>
</tr>
</tbody>
</table>
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. 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.

**Applicability:** All urban areas.

**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.

**Measure:** **Provide Multifamily Housing Tax Credits to Developers**

**Description:** Local governments can provide tax credits to developers for new or rehabilitated multi-family 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.

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.

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 tax credits; the amount of land on which the credits are applicable.

Data Sources: Local multi-family tax credit programs (city or local housing authority); use of programs in nearby or comparable cities.

Ease of Implementation: Technical — Moderate to Difficult. Tax incentives may not be sufficient incentive to attract development in some areas.

Political — Moderate. 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.

Market — Easy to Moderate. In larger, fast growing communities, demand for affordable housing is likely to be high.

Applicability: All urban areas

Conditions for Success: Demand for affordable housing in markets where profitability of affordable housing is marginal.

Measure: Provide Density Bonuses to Developers

Description: The local government allows developers to build housing at densities higher than are usually allowed by the underlying zoning. Density bonuses are commonly 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.

**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.

**Other Planning Goals:** Can be used to preserve nearby open space that is vulnerable to development.

**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.

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.

**Measure:** **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).

**Potential Benefits:** These techniques can protect rural resource lands and reduce sprawl outside 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 densities 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 areas. Subtract actual density from allowable capacity to obtain the amount of transferable development capacity. Identify receiving areas. Allocate transferable development capacity to receiving areas based on assessment of desirability for development. Estimate total capacity of receiving areas by adding capacity under the base zoning to transferable capacity. Finally, estimate the use of the TDR by conducting expert interviews, reviewing results in comparable cities, or by conducting a local market analysis.

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.”
### Measure: 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.

**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 interviews, review of zoning regulations.

**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.

### Measure: Allow Co-housing

**Description:** 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.
Potential Benefits: It provides another choice in a variety of housing options.
Other Planning Goals: Can be used to preserve particular tracts of land, preserving open space. Can also be used as an affordable housing option.
Scale of Impact: 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.
Estimating Impacts: 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.

Density may be a secondary objective of many co-housing ordinances. Thus, it is important to document these other objectives such as providing additional affordable housing units, preserving land, etc.

Data Sources: GIS inventory data, case studies of jurisdictions that allow co-housing.
Ease of Implementation: 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.

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.

Measure: 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.

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 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.

Measure: Increase Allowable Residential Densities

Description: 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.

Potential Benefits: 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.

Other Planning Goals: Smaller lots can yield more housing options for low-income residents.

Scale of Impact: 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.
Estimating Impacts: 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.

Data Sources: Local GIS data. Data on historical densities and underbuild in residential zones.

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.

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.

Measure: **Mandate Maximum Lot Sizes**

Description: This policy places an upper bound on lot size and a lower bound on density in single-family zones. For example, a residential zone with a 6,000 sq. ft. minimum lot size might have an 8,000 sq. ft. maximum lot size yielding an effective net density range between 5.4 and 7.3 dwelling units per net acre.

Potential Benefits: Ensures minimum densities in residential zones by limiting lot size. Places bounds 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: Moderate. 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 the manner they choose.

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

Applicability: All urban areas

Conditions for Success: Residential zones where substantial underbuild exists.

**Measure:** Mandate Minimum Residential Densities

**Description:** This policy is typically applied in single-family residential zones and is places a lower bound 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.

**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.

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

**Measure:** Reduce Street Width Standards

**Description:** This policy is intended to reduce land used for streets and slow down 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.

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

**Other Planning Goals:** They slow 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/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.

**Measure:** Allow Small Residential Lots

**Description:** Small residential lots are generally less than 5,000 sq. ft. This policy allows individual small lots within a subdivision or short plat. 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.

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.

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.

Measure: Encourage Infill and Redevelopment

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.

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 does 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.

For redevelopment, review local building permits on demolitions and reconstruction by type. If possible 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.

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.

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.

Measure: Enact an inclusionary zoning ordinance for new housing developments

Description: Inclusionary zoning requires developers to provide a certain amount of affordable housing in developments over a certain size. Inclusionary zoning is applied during the development review process.

Potential Benefits: Provides affordable housing on an incremental basis. Can reduce the need for government-assisted housing. Encourages affordable housing types to be dispersed throughout the community.
Other Planning Goals: It would provide another housing option for a variety of demographics within a community.

Scale of Impact: Small to moderate. This policy is not directed towards density; however, it may result in higher overall residential densities because of the relationship between density and housing cost.

Estimating Impacts: Increasing density is not an objective of inclusionary zoning. Thus, impacts should be estimated on the number of affordable housing units required by the policy. Estimating the number of units requires application of the zoning requirements to the number of acres to develop a distribution of the number of units developed by price range. This can then be compared to standard measures of housing affordability such as cost burden to estimate impacts.

Data Sources: Zoning regulation, Census data, assessment data on housing value.

Ease of Implementation: Technical — Easy to moderate. This policy is applied during the land use review process.

Political — Moderate to difficult. More affluent communities are more likely to resist the development of housing for low-income individuals and families.

Market — Easy. Communities with few affordable housing units would expand their supply, giving low-income residents more options.

Applicability: Urban areas with tight housing markets

Conditions for Success: Political support.

Measure: **Plan and zone for affordable and manufactured housing development**

Description: This policy would add manufactured housing as an outright use in specified residential zones. This policy ensures that land is available for this housing type.

Potential Benefits: Affordable and manufactured housing tends to be smaller than other housing types, and can be built to a higher density.

Other Planning Goals: Manufactured housing is an affordable housing type for many households. The policy expands housing choices for low-income residents. As an outright use in the zoning code, potential NIMBY issues with manufactured housing can be avoided.

Scale of Impact: Small. This policy is primarily about housing choice, however, manufactured housing densities are frequently higher than standard site built densities.
Estimating Impacts: The most obvious indicator for this measure is the number of acres that are in zoning districts that allow affordable or manufactured housing, or both. Not all land where such housing is allowed will develop as affordable or manufactured housing, so some method to estimate rate of development is required. Jurisdictions that already allow such housing times, reviewing the number of building permits provides a sound basis. Jurisdictions considering such policies should review trends in jurisdictions with comparable policies.

Data Sources: Local zoning ordinance, GIS data, building permit data, case studies of other jurisdictions.

Ease of Implementation: Technical — Easy. This policy would be implemented during the land use review process.

Political — Moderate to difficult. More affluent communities are more likely to resist the development of housing for low-income individuals and families.

Market — Easy to moderate. Communities with few affordable housing units would expand their supply, giving low-income residents more options.

Applicability: All urban areas

Conditions for Success: Political support for residential zones that allow manufactured and affordable housing types. A market for affordable housing.

MEASURES THAT INCREASE EMPLOYMENT CAPACITY

Measure: Develop an Economic Development Strategy

Description: An economic development strategy is intended to (1) identify desired types of businesses, and (2) identify the land needs of those businesses. Economic development strategies can be incorporated into the economic element of local comprehensive plans, or can be stand-alone policy documents.

Potential Benefits: An economic development strategy can identify potential future business growth in the community, allowing planners to encourage clustering of appropriate businesses, which improves land use efficiency.

Other Planning Goals: The strategy can encourage a healthy economy over the long term. A good strategy will help implement the community vision, consistent with resource considerations.

Scale of Impact: Small. Economic development strategies are not intended to increase density of development, although, they can lead to improved land use efficiency.
Estimating Impacts: Estimating the impacts of an economic development policy on land holding capacity is difficult. The evaluation should begin with a review of the specific strategies and develop appropriate indicators based on the strategies. Elements of the strategy that relate to density should be addressed with separate estimates. For example, if one strategy is adaptive reuse of brownfield sites, then estimating the employment capacity of the site will provide a sound basis for estimating acres of greenfield saved.

Data Sources: Expert interviews, case studies.

Ease of Implementation: Technical — Moderate. Economic development strategies require investment in research and process. Research should address opportunities and constraints in the community. The process should engage various stakeholders and consider their views.

Political — Moderate. City (or County) leaders must be willing to provide financial support to the strategy development process.

Market — Easy. There are no market issues in developing the strategy, although markets are key considerations in determining appropriate strategies.

Applicability: All urban areas

Conditions for Success: Political support from City (or County) leaders.

Measure: Create Industrial Zones

Description: Industrial zoning is intended to limit uses on specific sites to appropriate industrial uses. Some cities have ordinances that specify what types of industries can locate on specific sites. This measure is implemented through the local zoning ordinance.

Potential Benefits: These limits help ensure that industrial land can be saved for future industrial needs. Local governments can also plan for more efficient land use.

Other Planning Goals: Creating industrial zones can reduce conflicts between land uses and allow planning for appropriate infrastructure to serve industrial sites.

Scale of Impact: Small. Industrial zoning is not intended to increase density. Moreover, this policy can lead to industrial land banking which may create need for other land types.

Estimating Impacts: The impact of industrial zones on land holding capacity will depend on the specific regulations of the zoning code. The acreage in industrial zones provides the basis for evaluating the impacts. Jurisdictions should rely on lot coverage, floor area ratios, and employee per acre assumptions in their land needs analysis to complete a
preliminary evaluation. If available, data on actual employment density would provide a baseline.

Data Sources: Growth monitoring report, zoning regulation, buildable land needs assumptions.

Ease of Implementation: Technical — Easy. Industrial designations exist in most city’s zoning codes and could be amended to reflect desired community outcomes.

Political — Easy to moderate. Residents and commercial establishments will know where to expect industrial uses, giving them more information about potential uses of vacant land. Owners of property nearby industrial land may resist placing the designation in a particular location.

Market — Easy. Industrial zones give developers of industrial sites information about where their facility can be located.

Applicability: All urban areas

Conditions for Success: Demand for industrial development.

Measure: Zone areas by building type, not by use

Description: A local jurisdiction can alter its zoning code so that zones define the physical aspects of allowed buildings, not the uses within those buildings. This zoning approach recognizes that many land uses are compatible and locate in similar building types. For example, a manufacturing firm may have similar space requirements as a print shop.

Potential Benefits: Zoning areas by building type can ensure continuity in the types of structure and provides flexibility to building owners in leasing.

Other Planning Goals: A more flexible zoning code can make development easier, furthering economic development goals.

Scale of Impact: Small to moderate. This policy addresses urban design more than density.

Estimating Impacts: In some respects, zoning areas by building type provides more certainty about density that zoning by use. Estimating the impacts of this policy will require review of the zoning code language—specifically the building height and lot coverage regulations. If the zoning language includes a floor area ratio provision, this can be used with square foot of built space per employee assumptions to estimate employment capacity.

Data Sources: Local zoning code, PSRC employment density study.

Ease of Implementation: Technical — Difficult. This policy is considerably different than traditional zoning approaches. It would require substantial revision of most cities’ zoning codes and staff training on implementation.
Political — Moderate. A fundamental shift in the structure of the zoning code is likely to meet resistance from community members and stakeholders.

Market — Easy. The change should make development requirements more flexible.

Applicability: Large cities and other dense urban areas

Conditions for Success: Political support. Clearly defined policies regarding allowable building types.

Measure: Develop or strengthen local brownfields programs

Description: Local jurisdictions provide policies or incentives to encourage the redevelopment of underused industrial sites, known as brownfields. This policy can be implemented through provisions in local zoning ordinances that provide incentives for redevelopment of brownfields such as expedited permitting or reduced fees, or through targeted public investments.

Potential Benefits: Brownfields provide redevelopment opportunities. Moreover, many brownfields are large sites that can be master planned in ways consistent with other policies.

Other Planning Goals: Redevelopment of industrial sites to more productive uses, reducing need for greenfields, thus limiting sprawl.

Scale of Impact: Moderate to high. The actual scale of impact depends on the number of brownfields.

Estimating Impacts: The first step in estimating the impacts of a brownfields program would be to complete an inventory. The brownfield inventory should be considered in the context of the jurisdiction’s overall industrial land inventory. The inventory will identify the number of brownfield acres; review of local zoning requirements will provide some indication of allowable density. An estimate based on allowable density will provide an upper bound on capacity. Review of historical densities on the site, or densities on comparable sites, can provide the lower bound on capacity. Jurisdictions should also think about their planning objectives for the site to settle on a final density assumption. The final step in this analysis would be to make assumptions about absorption of brownfield sites. Not all brownfields may redevelop during the planning period. If the jurisdiction has a large inventory of greenfield sites, a lower absorption assumption may be merited.

Data Sources: Brownfields inventory; industrial lands inventory; zoning regulations; densities on comparable sites.

Ease of Implementation: Technical — Difficult. Brownfields present numerous challenges to redevelopment including site contamination.
Political — Moderate. While many members of the communities support the idea of a redeveloping underused site, building political support to publicly fund redevelopment can be difficult.

Market — Moderate. Demand for the redevelopment depends on many market factors.

Applicability: Urban areas with brownfields

Conditions for Success: Funds, either public or private, to finance the redevelopment of industrial sites.

MEASURES THAT SUPPORT INCREASED DENSITIES

Measure: Encourage the Development of Urban Centers and Urban Villages

Description: An urban center or urban village provides mixed uses with a development. Residences 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.

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 SOVs. 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: High. 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 urban center 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. Development of urban centers requires considerable planning and typically involves public investment to achieve desired development patterns and densities. Many cities indicate that retail is a challenge in mixed-use urban centers.

Political — Moderate. Because it is 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.

Measure: Allow Mixed Uses

Description: The zoning code would specifically allow multiple uses in a zone, instead of all residential, or all commercial. Mixed uses can be vertical (i.e., multiple uses within a single building) or horizontal (i.e., multiple uses in a given geographic area).

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.

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 where to apply the district, can be challenging.

Political — Moderate. Residents may resist mixed-use development in areas that are already developed.

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 often requires public subsidy.

Applicability: Larger communities; areas with larger tracts of land; areas where redevelopment or revitalization is desired; downtowns.

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

Measure: 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.

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 high. 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 transit center 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.

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.

Applicability: Urban areas with transit systems

Conditions for Success: Strong transit system; vacant or redevelopable land near transit stations.

Measure: Downtown Revitalization

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

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. Most 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. 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.

**Measure:** Impose High Development Fees and Exactions

**Description:** The local jurisdiction raises fees required for new development, to more fully cover development costs. This policy is implemented through the development approval process.

**Potential Benefits:**

- Increases cost of development, thereby encouraging more efficient use of land.

**Other Planning Goals:**

- Reduces cost borne by existing residents to fund expanded sewage, water, roads, and other urban services.
- May increase development densities.

**Scale of Impact:**

- Small. Not regionally effective unless adopted throughout a region; otherwise growth is driven to low-fee areas, which are usually further out.

**Estimating Impacts:**

Estimating impacts on density of this policy is difficult. Pre- and post-policy monitoring is one approach to gathering empirical data on impacts. Case studies of communities that have set high fee levels may provide some data on density impacts.

**Data Sources:**

- Density data pre- and post-policy adoption. Case studies.

**Ease of Implementation:**

- Technical — Easy. Many jurisdictions impose high development charges and can be used for model language. The fees cannot be extraordinarily high, they must be connected to the actual cost the new development imposes on local urban services.

- Political — Difficult. Fees are continually challenged by developers and are subject to political influences. However, support from existing residents can be strong.

- Market — Moderate. Developers will try to pass on the increased cost to buyers, possibly leading to higher prices.

**Applicability:**

- All urban areas.

**Conditions for Success:**

- Fee structure connected to actual cost of service.

**Measure:** Impose Restrictions on Physically Developable Land

**Description:** The local jurisdiction places restrictions on the type of development that can occur on vacant land. Restrictions can vary in strictness, from no development to limited
development. This policy is implemented through city limit or UGA boundaries.

Potential Benefits: This policy increases land use efficiency by limiting the supply of buildable land. It increases cost of land, encouraging denser development.

Other Planning Goals: Guides development to areas where development is desired and promotes development within areas where services will be available and are cost effective to provide. It can reduce sprawl development, thereby reducing reliance on cars for transportation.

Scale of Impact: Small to moderate. Effective for land where growth is blocked, but will not affect growth for an entire region. Can result in shifting of growth from one area of a region to another if all areas do not participate equally. Can also increase value of developable land; these costs are typically passed on to buyers.

Estimating Impacts: Identify the number of acres with restrictions. If this policy is effective, the restricted land will effectively be land banked, causing development to occur elsewhere. It is difficult to assess the impacts of this policy. Jurisdictions that adopt such policies should establish a monitoring program to evaluate impacts.

Data Sources: Case studies; inventory; local monitoring.

Ease of Implementation: Technical — Easy. This policy is implemented through the county zoning code.

Political — Moderate to difficult. Many residents will support measures to prevent urban encroachment on resource lands, but some landowners may see the measure as an infringement on the rights of private land owners. The reasons for not being developable must be clear and unchanging.

Market: Easy. Because this policy is regulatory in nature, the market does not play a large role in its success.

Applicability: Fast growing cities and urban areas

Conditions for Success: Community support for growth management and the protection of open space.

Measure: Require Adequate Public Facilities

Description: Local jurisdictions require developers to provide adequate levels of public services, such as roads, sewer, water, drainage, and parks, as a condition of development.

Potential Benefits: Ensures that public facilities are sufficient to accommodate impacts of development. Increases cost of development, thereby encouraging more efficient use of land. Adequate public facilities requirements are included as a condition of permit approval.
Other Planning Goals: Can reduce cost borne by existing residents to fund expanded sewage, water, roads, and other urban services. Can also help guide the geographic location of growth.

Scale of Impact: Small. Not regionally effective unless adopted throughout a region; otherwise growth is driven to low-fee areas, which are usually further out, causing sprawl.

Estimating Impacts: The primary means of evaluating the impacts of this policy are to anticipate how many developments would be denied because of adequate public facilities requirements. This would require preliminary analysis of the infrastructure included in the policy (roads, sewer, water, etc.) and where potential system failing points might be.

Data Sources: Local water/sewer/transportation systems plans. Case studies.

Ease of Implementation: Technical — Difficult because of need to continually measure adequacy.

Political — Difficult. “Adequacy” is continually challenged by developers and is subject to political influences. However, support from existing residents can be strong.

Market — Moderate. Developers will try to pass on the increased cost to buyers, possibly leading to higher prices.

Applicability: All urban areas.

Conditions for Success: Fair and equitable measures of adequacy.

Measure: Specific Development Plans

Description: Work with landowners, developers, and neighbors to develop a detailed site plan for development of an area. Allow streamlined approval for projects consistent with the plan. This policy results in a plan for a specific geographic area that is adopted as a supplement or amendment to the jurisdiction’s comprehensive land use plan.

Potential Benefits: Allows small-area specific plans that are responsive to local conditions. Allows a local vision for a site to be developed in a coordinated fashion. Can be used to increase density, create mixed-use development, preserve critical natural areas, as well as other objectives.

Other Planning Goals: They can help create developments that are attractive, safe, and consistent with neighborhood character, historic preservation, or other desired features.

Scale of Impact: Moderate to high. A specific development plan can lead to land use patterns and densities that would not otherwise be allowed in an area.

Estimating Impacts: Jurisdictions considering this policy should identify areas targeted for specific development plans. They should also have a vision for what such plans are intended to
accomplish in terms of density and development patterns. The desired densities can then be applied to acreages to estimate impacts. This can then be compared to existing zoning to determine impacts on land holding capacity.

Data Sources: Case studies; inventories; density goals.
Ease of Implementation: Technical — Moderate to difficult. Specific development plans require time, money, and public involvement.

Political — Easy to moderate. Gaining political support for specific area plans will depend on the characteristics of the area in question and the urgency of the issues the plan will address.

Market — Moderate to difficult. Having a specific area plan does not ensure that development will immediately occur. The market for development should be considered in the plan.

Applicability: All urban areas.
Conditions for Success: Strong political support; a market for the development types proposed.

Measure: **Interim Development Standards**
Description: Interim development standards are intended to preserve land in urbanizable areas for future development at urban densities. Apply policies and standards that preserve opportunities for future infill development at planned densities. Interim development standards are typically applied through a jurisdiction’s zoning ordinance as an overlay.

Potential Benefits: Can prevent land from developing at lower than desirable densities or in patterns that are not consistent with other planning objectives.

Other Planning Goals: Promotes development within urban areas where services will be available and are cost effective to provide. It can reduce sprawl development, thereby reducing reliance on cars for transportation.

Scale of Impact: Small to moderate. The scale of impact will depend on the amount of infill potential.

Estimating Impacts: Identify the number of acres with interim development standards. If this policy is effective, the restricted land will effectively be land banked, causing development to occur elsewhere. It is difficult to assess the impacts of this policy. Jurisdictions that adopt such policies should establish a monitoring program to evaluate impacts.

Data Sources: Case studies; inventory; local monitoring.
Ease of Implementation: Technical — Moderate to difficult. Interim development standards require careful thought and discussion and need
to reflect location-specific objectives.

Political — Moderate to difficult. This policy requires property owners to potentially delay development of their land, or to develop in different ways.

Market — Easy. This policy does not rely on market forces.

Applicability: All all urban areas, especially those that want to promote infill

Conditions for Success: Large inventories of developable land where low density and/or non-contiguous development can occur.

Measure: **Encourage Transportation-Efficient Land Use**

Description: Review and amend comprehensive plans to encourage patterns of land development that encourage pedestrian, bike, and transit travel. This policy is typically implemented at the development review level. It can also be implemented through plan designation and zoning maps through consideration of the geographic distribution of planned land uses and densities.

Potential Benefits: Transportation-efficient land use 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 automobile trips and need for street improvements.

Scale of Impact: Small to moderate. Density is not a primary objective of this policy. Transportation-efficient land use plans, however can facilitate development patterns that achieve higher densities.

Ease of Implementation: Technical — Difficult. This planning goal requires many elements of a local plan to be coordinated. Such coordination still does not assure that land uses will be transportation efficient.

Political — Easy to moderate. Transportation efficient land uses are considered in most land use plans, thus political considerations should not be difficult.

Market — Easy. Achieving desired land use patterns is very difficult due to market issues and households’ ability to choose where they live and work.

Applicability: All urban areas.

Conditions for Success: Plans that integrate transportation and land uses effectively.
<table>
<thead>
<tr>
<th>Measure:</th>
<th>Urban Growth Management Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Identify a lead jurisdiction for growth management inside urban growth areas. The urban growth area can include city and county land. The agreements define lead responsibility for planning, zoning, and urban service extension within these areas. The agreements exist between various government jurisdictions and specify jurisdiction over land use decisions, infrastructure provision, and other elements of urban growth.</td>
</tr>
<tr>
<td>Potential Benefits:</td>
<td>Can reduce sprawl by ensuring new development is contiguous to existing development.</td>
</tr>
<tr>
<td>Other Planning Goals:</td>
<td>Results in better coordinated planning and implementation.</td>
</tr>
<tr>
<td>Scale of Impact:</td>
<td>Moderate to large. Urban growth management agreements can (1) preserve lands slated for development in large tracts, and (2) ensure that new lands are annexed and adequately serviced.</td>
</tr>
<tr>
<td>Estimating Impacts:</td>
<td>The key impacts from urban growth management agreements will be efficient urbanization and provision of infrastructure. To estimate the impacts of urban growth management agreements jurisdictions should conduct an analysis of densities and the cost of infrastructure inside and outside the urban growth area boundary.</td>
</tr>
<tr>
<td>Data Sources:</td>
<td>Growth monitoring report, maps of the location of development outside city limits, cost of infrastructure data.</td>
</tr>
<tr>
<td>Ease of Implementation:</td>
<td>Technical — Moderate to difficult. Urban growth management agreements frequently require several governmental jurisdictions to agree on many aspects of growth. Jurisdictions can include cities, counties, utilities, school districts, and special districts. Political — Moderate. Multiple jurisdictions means multiple stakeholders, which can slow the decision-making process. Market — Easy.</td>
</tr>
<tr>
<td>Applicability:</td>
<td>All urban areas. Urban growth management agreements do not rely on the market for their implementation.</td>
</tr>
<tr>
<td>Conditions for Success:</td>
<td>Political will of multiple jurisdictions.</td>
</tr>
<tr>
<td>Measure:</td>
<td>Create Annexation Plans</td>
</tr>
<tr>
<td>Description:</td>
<td>In an Annexation Plan, cities identify outlying areas that are likely to eligible for annexation. The Plan identifies probable timing of annexation, needed urban services, effects of annexation on current service providers, and other likely impacts of annexation.</td>
</tr>
</tbody>
</table>
**Potential Benefits:** Prioritizes areas for future city boundary expansions. Allows for efficient provision of urban services and encourages efficient urban patterns.

**Other Planning Goals:** Annexation Plans provide residents more information about likely changes in jurisdictional authority and urban services.

**Scale of Impact:** Moderate. Annexation plans can help ensure efficient growth patterns and can reduce need for land at the urban fringe.

**Estimating Impacts:** The key objectives of an annexation plan are efficient urbanization and provision of infrastructure. To estimate the impacts of an annexation plan would be documented at the time the plan was developed.

**Data Sources:** Growth monitoring report, maps of the location of development outside city limits, cost of infrastructure data.

**Ease of Implementation:**
- **Technical — Easy to moderate.** Annexation plans are relatively easy to develop,
- **Political — Easy.** Some annexations meet more resistance from residents than others, but a Plan helps identify issues early in the process, allowing more time for different stakeholders to reach an agreement.
- **Market — Easy.** Annexation plans provide certainty to land markets by clearly identifying lands that are targeted for urban development.

**Applicability:** All cities in cooperation with the County

**Conditions for Success:** Political support.

**Measure:** **Encourage developers to reduce off-street surface parking**

**Description:** This policy provides incentives to developers to reduce the amount of off-street surface parking through shared parking arrangements, multi-level parking, or use of alternative transportation modes.

**Potential Benefits:** Reduces surface parking—a major use of land. Less land used for parking can improve the overall land holding capacity—particularly for commercial lands.

**Other Planning Goals:** Reduces impermeable surfaces, reducing water run-off.

**Scale of Impact:** Small to moderate. Many businesses depend on ample parking to attract customers. The policy is probably more effective for office development.

**Estimating Impacts:** Evaluate the difference between the relaxed parking standards and existing standards. Estimate the amount of development, by type and how many parking spaces would be required under the existing and relaxed standards. Estimate the average amount of land used per
parking space and multiply it by the difference between number of spaces needed under existing standards and the relaxed standards.

**Data Sources:** Analysis of land dedicated to parking, by zone, for selected areas.

**Ease of Implementation:**

Technical — Easy to moderate. The policy requirements are relatively easy to draft and adopt, however, this policy may require more complex site designs and agreements with nearby property owners.

Political — Difficult. Many firms want accessible and visible parking close to their facilities,

Market — Moderate. Multi-level parking is more expensive to building than surface parking.

**Applicability:** Areas zoned commercial, mixed use, certain residential zones.

**Conditions for Success:** Political support; Clearly defined parking standards; approaches to make more efficient uses of parking.

**Measure:** **Implement a program to identify and redevelop vacant and abandoned buildings**

**Description:** Many buildings sit vacant for years before the market facilitates redevelopment. This policy encourages demolition and would clear sites, making them more attractive to developers and would facilitate redevelopment.

**Potential Benefits:** It reduces sprawl development by reusing land within developed areas. Where services are already provided, the policy contributes to a more efficient use of land, although it doesn’t necessarily lead to higher density development on individual sites.

**Other Planning Goals:** The policy can reduce blighted areas, and addresses safety issues that are frequently associated with vacant buildings.

**Scale of Impact:** Small to moderate. Most cities process few demolition permits in any given year. Redevelopment can occur at higher densities.

**Estimating Impacts:** The first step is to inventory vacant and redevelopable structures. For vacant structures, estimate capacity when fully occupied. For redevelopable structures, estimate density of development under current zoning and market conditions. Subtract housing/employment capacity of vacant and redevelopable structures likely to be occupied or redeveloped during the planning period from total housing and employment need.

**Data Sources:** Inventory of vacant and redevelopable buildings. Estimate of capacity of vacant and redevelopable buildings.
Ease of Implementation: Technical — Moderate to difficult. The ease of implementation would depend on how the policy is structured—whether it is regulatory or incentive-based. Either way cities would have to make a determination about when a building should be razed.

Political — Moderate. While many members of the communities support the idea of a reducing blight, many stakeholders might feel razing is too drastic of an option.

Market — Difficult. Many market forces contribute to blight, and market demand for the area may be low, regardless if the building is new or old.

Applicability: Urban blighted areas

Conditions for Success: Political support for redevelopment; market conditions conducive to redevelopment.

Measure: Concentrate critical services near homes, jobs, and transit

Description: This policy would require critical facilities and services be located in areas that are accessible by all people. For example, a hospital could not be located at the urban fringe in a business park. This policy would be implemented through provisions in the local zoning ordinance pertaining to siting specific critical services.

Potential Benefits: Makes critical services more accessible, can reduce automobile trips.

Other Planning Goals: Maintaining critical services near existing development helps maintain viable residential and business districts, minimizing demand for new developments at the urban fringe.

Scale of Impact: Small. This policy does not intend to result in higher density development.

Estimating Impacts: As described above, the scale of impact on density may be relatively small. The key impacts will be on transportation patterns. These can be modeled using standard transportation models by substituting proposed services into transportation analysis zones and modeling the traffic impacts.

Data Sources: Proposed location of land uses. Estimates of population and employment by TAZ.

Ease of Implementation: Technical — Easy to difficult. This policy is relatively easy for public facilities; but can be difficult for private facilities.

Political — Moderate to difficult. Private service providers are likely to resist mandated locations, especially if they expect to expand in the near future.
Market — Easy. This policy does not rely on market factors for implementation.

Applicability: All urban areas

Conditions for Success: A well-defined plan that identifies critical facilities and support from the jurisdiction’s capital improvement program.

Measure: **Locate civic buildings in existing communities rather than in greenfield areas**

Description: Local governments, like private builders, are tempted to build on greenfield sites because it is less expensive and easier. However, local governments can "lead by example" by making public investments in desired areas, or redeveloping target sites.

Potential Benefits: Civic buildings provide an anchor for other development and can form the core of a community. Civic buildings can encourage other desired development types. Local governments can "lead by example" by making public investments in desired areas, or redeveloping target sites.

Other Planning Goals: Civic buildings contribute to the vitality of a neighborhood. Employees in those buildings purchase nearby services, increasing demand for private business in the area.

Scale of Impact: Small to moderate. Locating civic buildings in existing communities can have direct impact on land consumption; however, civic structures account for a small percentage of total development in most communities.

Estimating Impacts: Estimate land needed for public facilities and the amount of land that can be substituted on redevelopable or infill sites.

Data Sources: Estimate of land needed for public facilities and potential redevelopment and infill sites.

Ease of Implementation: Technical — Easy to moderate. Requires communities to identify appropriate buildings or sites to locate civic activities.

Political — Easy to moderate. Some community stakeholders may argue that governments should build in the lowest cost manner, such as on greenfields.

Market — Easy.

Applicability: Developed central cities and urban centers

Conditions for Success: Communities must have appropriate sites to locate civic activities and the demand for new facilities.
**Measure:** 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.

**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.

**MEASURES TO MITIGATE THE IMPACT OF DENSITY**

**Measure:** Design Standards

**Description:** Design standards seek to preserve and enhance the character of a community or district. They are most typically applied in the design phase of projects or during site review. Design standards are typically implemented as another section of the development code. Some cities have design review boards in addition to the planning commission.

**Potential Benefits:** They help ensure development is attractive, safe, and consistent with neighborhood character, historic preservation, or other desired features.
### Other Planning Goals:
Good design standards can make a dense development aesthetically pleasing and attractive to home buyers and can mitigate the impact of higher density.

### Scale of Impact:
Small. Design standards are not intended to increase density, however, they can make density less evident that it might otherwise be in the absence of design standards.

### Estimating Impacts:
Design standards will have no measurable impact on density.

### Data Sources:
Not applicable.

### Ease of Implementation:
Technical — Difficult. Design standards can be very difficult to develop and implement given the wide variation of design options developers have.

Political — Difficult. The technical difficulty of design standards is essentially a political difficulty: getting multiple players to agree to a single set of standards. Moreover, they tend to be controversial.

Market — Easy to moderate. Market acceptance of design standards depends on how restrictive the standards are.

### Applicability:
All urban areas

### Conditions for Success:
A clearly articulated vision; an ordinance that is easy to interpret and implement.

#### Measure: Urban Amenities for Increased Densities

### Description:
Amenities include parks, trails, waterfront access, and cultural centers. Such amenities are typically implemented through the parks plan, the downtown plan, specific area plans or other public investments. Some cities require amenities to be included with larger projects.

### Potential Benefits:
The goal of urban amenities is to contribute to the overall design vision of the community and promote livability in denser areas.

### Other Planning Goals:
Amenities can contribute to the vibrancy of downtown areas, helping other goals such as downtown revitalization.

### Scale of Impact:
Small. Urban amenities are intended to mitigate the impact of higher densities but can be expected to have little effect on overall density.

### Estimating Impacts:
Urban amenities will have no measurable impact on density. Aesthetic impacts can be evaluated through interviews or surveys.

### Data Sources:
Not applicable.

### Ease of Implementation:
Technical — Easy to Moderate. Urban amenities typically require public investment and may require cooperation with local land owners and businesses and also typically require a plan for their location or adoption of locational criteria.
Political — Easy to Moderate. Political support (or resistance) depends on the scale of the amenity and if the entire community will benefit. Publicly-funded amenities should be equitably distributed throughout a community, to prevent one neighborhood working to prevent development of amenities in a different neighborhood.

Market — Easy. Many of these amenities are publicly funded.

**Applicability:** All urban areas

**Conditions for Success:** Strong political support, a cohesive community vision.

**Measure:** **Conduct community visioning exercises to determine how and where the community will grow**

**Description:** Community visioning processes attempt to build consensus around the type, amount, and location of future development. Visioning exercises are typically included at the beginning of a comprehensive planning process and are used to update plan goals and objectives.

**Potential Benefits:** Can identify areas of consensus on other reasonable measures. Can reduce challenges and delays to development, can facilitate desired types of development, and can add certainty to the development review process.

**Other Planning Goals:** Visioning can lead to a more coherent comprehensive plan and can build public support for the plan.

**Scale of Impact:** Moderate to large. Visioning can have substantial impacts on land designation, densities, and design.

**Estimating Impacts:** If the visioning process results in density goals, these can be used to estimate impacts. If not, impacts on density can possibly be estimated by evaluating desired land use patterns.

**Data Sources:** Visioning process.

**Ease of Implementation:** Technical — Easy to moderate. Implementing a visioning process is relatively easy, translating it into policy is more difficult.

Political — Moderate to difficult. A visioning process by definition requires public input. Elected officials must be willing to listen to the public and integrate their input in meaningful ways.

Market — Easy. This policy does not rely on market forces for implementation.

**Applicability:** All urban areas

**Conditions for Success:** Political support.
**OTHER MEASURES**

**Measure:** Mandate Low Densities in Rural and Resource Lands

**Description:** This policy is intended to limit development in rural areas by mandating large lot sizes. It can also be used to preserve lands targeted for future urban area expansion. Low density urban development in fringe areas can have negative impacts of future densities and can increase the need for and cost of roads and other infrastructure.

**Potential Benefits:** Lower densities outside urban areas protect resource lands and promote development within urban areas where services will be available and are cost effective to provide. It can reduce sprawl development, thereby reducing reliance on cars for transportation.

**Other Planning Goals:** Protects farm and forest lands from development, preserving open space.

**Scale of Impact:** Moderate to high. This policy serves to encourage more compact urban growth by increasing the cost of developing outside urban areas.

**Estimating Impacts:** Inventory lands where this policy applies, including historic development trends. Effective implementation of this policy should reduce rates of parcelization and development in rural areas.

**Data Sources:** Geographic information system data; building permits.

**Ease of Implementation:** Technical — Easy. This policy is implemented through the county zoning code.

Political — Moderate to difficult. Many residents will support measures to prevent urban encroachment on resource lands, but some landowners may see the measure as an infringement on the rights of private land owners.

Market — Easy.

**Applicability:** Rural areas

**Conditions for Success:** Community and political support for the protection of lands identified for future urban development.

**Measure:** Urban Holding Zones

**Description:** This policy identifies sites for future expansion and limits development to preserve options in those sites. This policy would be implemented through a specific zone or overlay. Urban holding areas would be identified on a map.

**Potential Benefits:** Land in sizes suitable for future urban scale development is protected from sprawl development until municipal services are available to the site.
Other Planning Goals: Temporarily protects open space at the edge of urban development. Cities can expand urban services in an efficient and cost-effective manner.

Scale of Impact: High. This policy can have substantial impacts in preserving lands from low-density development patterns.

Estimating Impacts: Inventory lands where this policy applies, including historic development trends. Effective implementation of this policy should reduce rates of parcelization and development in rural areas.

Data Sources: Geographic information system data; building permits.

Ease of Implementation: Technical — Easy. This policy would be implemented during development review.

Political — Moderate to difficult. Many residents will support measures to prevent urban encroachment on resource lands, but some landowners may see the measure as an infringement on the rights of private landowners.

Market — Easy. Urban holding areas can impact future land values by identifying lands that are designated for urban development.

Applicability: All appropriate urban areas

Conditions for Success: Community and political support for the orderly urban growth and the protection of open space.

Measure: **Phasing Urban Growth**

Description: This policy is related to other urban service policies that seek to direct growth. The primary objective is orderly urban growth.

Potential Benefits: This promotes development near existing urban services, reduces sprawl development, and reduces “hop-scotch,” or “leap-frog”, development.

Other Planning Goals: It also reduces capital spending, increases efficiency in providing capital facilities, promotes more orderly and cost-effective growth, and promotes more efficient use of scarce land resources.

Scale of Impact: Small. Phasing is not intended to increase densities and can be expected to have minimal impact on density.

Estimating Impacts: Review existing development patterns within the UGA and the location of subdivisions and other developments relative to streets, sewers, and water systems. Estimate average distance to services under historical development patterns and under the phased growth policy.

Data Sources: Growth monitoring report; analysis of planned areas for urban expansion under phasing policy.
Ease of Implementation: Technical — Moderate to difficult. Phasing requires coordination with service providers.

Political — Moderate. Many residents will support measures to prevent urban encroachment on resource lands, but some landowners may see the measure as an infringement on the rights of private land owners.

Market — Easy.

Applicability: Large fast growing; Small fast growing

Conditions for Success: Community and political support for the orderly urban growth and the protection of open space.

Measure: Capital Facilities Investments

Description: Investment in public facilities can be effectively used to guide the location of growth. This policy is implemented through capital improvement plans and the local capital budgeting process.

Potential Benefits: Phased, infill development is more cost effective than sprawl and helps retain rural and natural resource lands. Adequate infrastructure to support compact urban growth will help UGAs be livable, attractive places. Outside UGAs, rural lifestyles can be maintained better when infrastructure investments provide for rural needs without encouraging urban encroachment.

Other Planning Goals: Reduce infrastructure costs.

Scale of Impact: Small. Public facilities policies are more effective at guiding the location of growth than increasing density or efficiency of land uses.

Estimating Impacts: Identify areas where capital facilities investments are planned and monitor growth patterns in those areas.

Data Sources: Growth monitoring report; analysis of planned areas for urban expansion under phasing policy.

Ease of Implementation: Technical — Easy. Many cities have used focused public investment to guide the location and timing of growth.

Political — Easy to moderate. Cost impacts will need to be documented to gain political support.

Market — Easy.

Applicability: All urban areas

Conditions for Success: Community and political support for the orderly urban growth and the protection of open space.

Measure: Environmental Review and Mitigation Built into the Subarea Planning Process

Description: Building environmental review and mitigation into the subarea planning process can address key land use
concerns at a broader geographic scale, streamlining review and approval of individual developments.

Potential Benefits: This approach expedites a project’s permitting decisions while ensuring that infrastructure and environmental considerations are addressed during the planning phase.

Other Planning Goals: Protect critical natural areas.

Scale of Impact: Small to moderate. This process is not specifically intended to increase densities, but can be used to identify site opportunities that can lead to more efficient land use.

Estimating Impacts: Identify areas where environmental review would be applied to subareas; inventory acres of lands where environmental review has been applied during the subarea planning process.

Data Sources: Environmental review documents.

Ease of Implementation: Technical — Moderate to difficult. Conducting environmental review at the subarea level can be more complex than site-by-site evaluation.

Political — Easy.

Market — Easy. This policy can reduce development review burdens, making development more attractive.

Applicability: All urban areas.

Conditions for Success: Larger areas where consolidated environmental review makes sense.

Measure: Partner with nongovernmental organizations to preserve natural resource lands

Description: Local governments can partner with land trusts and other nongovernmental organizations to leverage limited public resources in preserving natural resource lands. The two work together to acquire natural resource lands or to place conservation easements on them. Land trusts are natural partners in this process and have more flexibility than local governments in facilitating land transactions. This policy is implemented through the development of long-term partnerships.

Potential Benefits: The measure protects natural resource land from development, thus constraining urban development to other areas. It preserves open space and natural areas in desired locations.

Other Planning Goals: The measure permanently protects the natural resource land, provided the community a valuable open space amenity.
Scale of Impact: Small. This approach is not intended to increase density, and may actually increase need for land if areas not identified for acquisition are acquired.

Estimating Impacts: Inventory critical areas. Meet with representatives of non-governmental organizations to discuss partnerships, funding and other key issues related to land acquisitions. Make a reasoned estimate of potential land conserved as a result of the partnership.

Data Sources: Critical area inventory; meetings with non-profit staff.

Ease of Implementation: Technical — Moderate to difficult. This approach requires cities to invest effort in developing partnerships with nongovernmental organizations and then to work with those organizations on projects.  

Political — Easy. Local jurisdictions can avoid political issues by relying on a nongovernmental organization.

Market — Easy. This policy does not rely on market forces for implementation.
Applicability: All jurisdictions
Conditions for Success: Ability to work with non-profit organizations. Critical natural areas.