Smart Development Code Handbook

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Transportation and Growth Management Program
Oregon Department of Transportation
Oregon Department of Land Conservation and Development

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Smart Development

Oregon is changing.

Oregon is changing. Especially in the last decade, most Oregonians have noticed a substantial difference in the environment of their daily lives, changes that stem from a growing population and a new economy. Despite new or wider roads, traffic is worse than it used to be. Land that used to be open space—berry fields, high desert, and coastline alike—has been changed by increased development. Air pollution seems worse than before. Residents talk about the loss of a sense of community. All these changes and all the new choices—the new houses, new shopping centers, new industry—leave us feeling vaguely unsettled, as if somehow, it could have been done better.

As pressure builds on Oregon's communities, both urban and rural, citizens are seeking ways to accommodate growth while maintaining a sense of place and community. In responding to the challenge of growth, Oregonians' love of the land demands attention to environmental needs, and their essential pragmatism requires methods that are cost-effective and efficient. Yet as local people struggle to find creative and viable solutions to development problems, many have discovered that conventional practices do not always allow for methods that promote community, choice and efficiency. Commonly used strategies for dealing with the problems of a changing landscape are not succeeding.

By drawing on the best features of older neighborhoods and combining them with the best ideas of the present, we can choose a new path. Oregon can choose a different style of development: one that revitalizes existing neighborhoods and creates quality new ones, that limits sprawl and preserves natural resources, that makes travel more convenient and less time-consuming, and that creates a sense of community while building more attractive and functional neighborhoods. This approach is known as "smart development."

To many Oregonians, growth has become synonymous with traffic congestion.

Smart Development Defined

This handbook shows a development approach that adheres to the following five principles:

1. Efficient Use of Land Resources
2. Full Utilization of Urban Services
3. Mixed Use
4. Transportation Options
5. Detailed, Human Scaled Design

These principles, first outlined by Livable Oregon, Inc., are "smart" ways of building a community, providing numerous benefits to all citizens. Smart development represents a wise use of resources and facilities, and promotes the building of community. Furthermore, smart development is both financially successful and publicly responsible.

Smart development improves on conventional development patterns because it conserves valuable land, energy, and facilities resources; offers people multiple convenient transportation options; relieves traffic congestion and air pollution; offers residents a variety of dwelling choices; and creates attractive community-oriented neighborhoods.

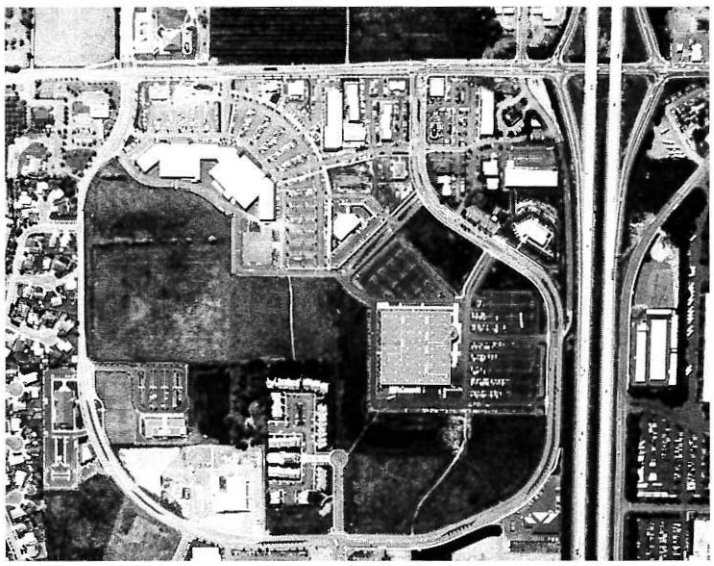
SMART DEVELOPMENT'S PAST

Smart development supports face-to-face, informal meeting between people—a fundamental aspect of community building.

Most of the attributes of smart development can be found in older, pre-1950 American neighborhoods, many of which have held their value over decades as preferred places to live. These neighborhoods are laboratories of walkable, compact, mixed-use development. In the first half of this century, American cities and towns were substantially different in their design. Street networks with small blocks connected neighborhood to neighborhood. Detached and attached housing often stood next to, or within a block of each other. Local commercial services and parks were dispersed within or at the edges of neighborhoods. The basic compatibility of building types allowed for easy proximity of diverse uses and densities. Buildings were designed to contribute to a harmonious streetscape, and

parking played a secondary role. Planning, engineering, regulatory, financial, building and market systems worked together to allow and encourage this style of development.

Around 1950, Oregon and the rest of the country experienced a fundamental change in the built landscape, a shift driven by new demographics, new economics, and rise of the automobile. Separated, single-use developments became the custom. Street patterns became disconnected, typified by the dead-end cul de sac. Stand-alone office parks, shopping centers, recreation centers, apartment complexes, and single family tract housing developments defined the newer American landscape. Different building types no longer shared proximity, so compatibility no longer mattered. As an example, the corner store, which functions compatibly within a neighborhood, evolved into the auto-oriented convenience store located on a commercial strip.



A typical Oregon, post-World War II development pattern. All the components of a town are here—a city hall, library, church, college, post office, shopping center, apartments, and houses. Though buildings are within walking distance of each other, they are separated by vast, inhospitable parking lots, wide non-traversable streets, or fragmented sidewalks. Not surprisingly, few people walk in this area.

Gradually, standard subdivision and zoning practices have changed to accommodate this kind of development, and the financial, regulatory and building industries have become almost exclusively focused on separate-use projects. As a result, financing and approval processes for these kind of conventional projects are relatively straightforward and low-risk.

Smart development projects run into difficulty because they draw on lessons learned from older neighborhoods, on a style of building that has been largely forgotten for the last 40 years. These projects sometimes clash with convention, facing procedural problems that make them more difficult to build.

Encouraging Smart Development Codes

This handbook provides guidance to communities in determining whether their local codes and standards encourage, support, or impede smart development. This handbook also aims to help readers identify whether smart development principles and ideas fit their communities, and if smart development ideas would help to achieve local goals or meet state planning requirements.

By adopting House Bill 2709, which was codified in Oregon Revised Statute 197.296, the 1995 Oregon Legislature confirmed its support of land-use planning. To meet requirements set out in the new law, communities must identify and evaluate measures that will help them accommodate necessary development. Smart development can help local governments comply with these rules.

After identifying and explaining the principles of smart development, this handbook examines the most common obstacles to achieving these principles. Next, this handbook offers solutions or approaches to address these obstacles, accompanied by practical and useful explanations and examples. Not all of these ideas will be new to readers of the handbook, but hopefully the manner in which they are presented will help pinpoint specific problem areas in local regulations.

Furthermore, not all of the strategies suggested here will be appropriate for all communities. Nevertheless, planners, planning commissioners, developers, neighborhood activists, and elected officials should consider using smart development strategies at appropriate times, such as during periodic review, development of master or specific plans, or in response to requests for individual plan or code amendments.

Smart development is neither unusual, nor is it particularly new. In addition to existing development patterns that subscribe to smart development principles, an increasing number of new projects can be found in Oregon, the Northwest, and throughout the United States.

WHO MIGHT INITIATE CHANGE?

Change can start from a number of sources: a developer of a subdivision might suggest a new way to address land partitioning; a planner or planning commissioner might return from a conference where mixed uses were discussed and seek to apply the ideas to some of the community's neighborhood centers; or an elected official might want to consider different road standards that would bring down the public costs of development. No matter who has an interest in pursuing smart development strategies, this handbook will help address these concepts and help guide the reader to resources.

This handbook discusses specific obstacles and solutions, leaving in local hands the determination of where changes might be needed.

The primary audience for this handbook is local planners, developers and planning commissioners. Others who may find this document useful in seeking to encourage smart development in their communities include neighborhood and community activists, elected officials, and other citizens who ask why things cannot be done differently.

HOW TO INITIATE CHANGE

Initiating smart development strategies in some communities may not require any changes in codes and standards, in others it may require a few changes to allow for certain principles to be applied, and in some cases, it may require more thorough, systemic changes.

The decision to change local development codes in most Oregon cities and towns usually takes one of two forms: a comprehensive approach or a focused approach. In the first approach, a review of current development patterns and trends might show that smart development practices are not occurring. As a

result, a thorough evaluation of procedures, codes and standards would be performed. This review would scrutinize the obstacles and determine what might be done to encourage or allow use of these principles.

The second approach might evolve from a specific application for approval, a request for a code change to accommodate a development, or an effort undertaken by a jurisdiction to review a portion of its codes. As a result of these actions, certain obstacles would become apparent. At that point, planners can make the decision to focus on specific obstacles or undertake a more general review, as outlined above.

Recognizing that there are many arrangements and combinations of codes in different Oregon communities, this handbook does not attempt to identify where barriers can be found in the regulatory structure. Instead, this document discusses specific obstacles and responses, leaving in local hands the determination of where changes might be needed. This handbook will help identify opportunities to utilize, encourage, or allow smart development principles. Ultimately, the decision of whether to use some or all of these principles will depend on how well they fit a community's goals and what it wants to achieve.

Ultimately, the decision of whether to use some or all of these principles will depend on how well they fit a community's goals.

Five Principles of Smart Development

The following five principles represent the most notable aspects of smart development. Together they describe an interconnected system of community building.

PRINCIPLE 1 EFFICIENT USE OF LAND AND ENERGY RESOURCES

Smart development preserves Oregon's most precious resource: Oregon

Smart development supports the preservation of land and natural resources. These benefits result from compact building forms, infill development, and moderation in street and parking standards. At the regional scale in Oregon, urban growth boundaries have encouraged more compact development patterns, protecting farmland from urban sprawl. At the local scale, compact building patterns preserve land for city and neighborhood parks as well as local woods and wetlands. Furthermore, compact development shortens trips, lessening dependence on the automobile, and therefore reducing levels of energy consumption and air pollution. Finally, a compact development pattern supports a more cost-effective water management process than does low-density fringe development.

PRINCIPLE 2 FULL UTILIZATION OF URBAN SERVICES

The same frugality of land development also supports efficient use of public and private infrastructure. Smart development means creating neighborhoods where more people will use existing services like water lines and sewers, roads, emergency services, and schools. Under-building, whether within or outside urban areas, places a financial strain on communities trying to provide for the construction and maintenance of infrastructure needs.

Building compactly does not mean all areas must be densely developed.

Building compactly does not mean all areas must be densely developed. Rather, the goal is an average density for the area, at a level that makes full use of urban services. Averaging allows for areas to have a mix of low, medium, and high intensity development. Mixing densities to encourage efficient use of services

also means requiring a high level of building and siting compatibility, encouraging neighborhoods to have both character and privacy.

Careful street sizing and the accommodation of some parking on streets reduces impervious surfaces and efficiently uses urban services by saving on land acquisition, construction, and maintenance costs. In short, streets should be sized for their use: lower density areas that have little through traffic are best served by slower, narrower streets, while transportation corridors that move district-wide traffic need wider travelways.

PRINCIPLE 3 MIX OF USES

Locating stores, offices, residences, schools, and recreation spaces within walking distance of each other in compact neighborhoods with pedestrian-oriented streets promotes:

- Independence of movement, especially for the young and the elderly who can conveniently walk, cycle, or ride transit;
- Safety in commercial areas, through around-the-clock presence of people;
- Reduction in auto use, especially for shorter trips;
- Support for those who work at home, through nearby services and parks; and
- A variety of housing choices, so that the young and old, singles and families, and those of varying economic ability may find places to live.

Building compactly means that neighborhoods make full use of existing urban services, and can more easily afford amenities such as parks.

Mixed-use examples include a corner store in a residential area, an apartment near or over a shop, and a lunch counter in an industrial zone. Most codes prohibit the co-location of any residential and commercial buildings. This prohibition is based on the functional and architectural incompatibility of the buildings. Using design standards, in tandem with mixed-use zoning, overcomes incompatibility. Additionally, limitations on commercial functions, such as hours of operation and delivery truck access, may be necessary. More fundamentally, to gain the full benefits of a mix of uses, buildings must be conveniently connected by streets and paths. Otherwise, people will still be inclined or required to use cars, even for the shortest trips.

Well-designed streets comfortably accommodate pedestrians, cyclists and motorists

For people who have the option to choose how they travel, transportation must be safe, convenient, and interesting. These performance factors affect sidewalk and street design, placement of parking, and location of building fronts, doors and windows. Well-designed bike lanes and sidewalks protect people from vehicle accidents. Orienting windows and doorways to the sidewalk increases awareness and the safety of the streetscape.

Convenience begins with a connected network of streets that provides alternative routes with reasonable walking distances between destinations. A properly designed network also promotes neighborhood safety by routing the heaviest traffic around neighborhoods, without sacrificing street connectivity. Field studies have shown that the level of aesthetic interest is a critical factor in choosing a walking route. People are unwilling to walk further than about 300 feet through a parking lot to reach a desired destination, yet they will walk at least three times that distance along a street of storefronts.

Providing compact, mixed-use development connected by safe, convenient, and interesting networks of streets and paths promotes:

- Walking, cycling, and transit as viable, attractive alternatives to driving;
- Less traffic congestion, and air pollution;
- The convenience, density, and variety of uses necessary to support transit;
- A variety of alternative routes, thereby dispersing traffic congestion; and
- Lower traffic speeds, making neighborhoods safer.

PRINCIPLE 5 DETAILED, HUMAN-SCALED DESIGN

Community acceptance of compact, mixed-use development requires compatibility between buildings to assure privacy, safety and visual coherency. Similar massing of buildings, orientation of buildings to the street, the presence of windows, doors, porches and other architectural elements, and effective use of landscaping all contribute to successful compatibility between diverse building types.

Human-scaled design is also critical to the success of streets and paths as preferred routes for pedestrians, cyclists and motorists alike. In general, smart street design considers the role of pedestrians along with that of vehicular traffic, emphasizing the quality of the walking environment. For instance, parallel parking may be considered a hindrance to vehicle flow, but for pedestrians and shop owners, on-street parking is a benefit because it reduces speeding traffic and protects the sidewalk.

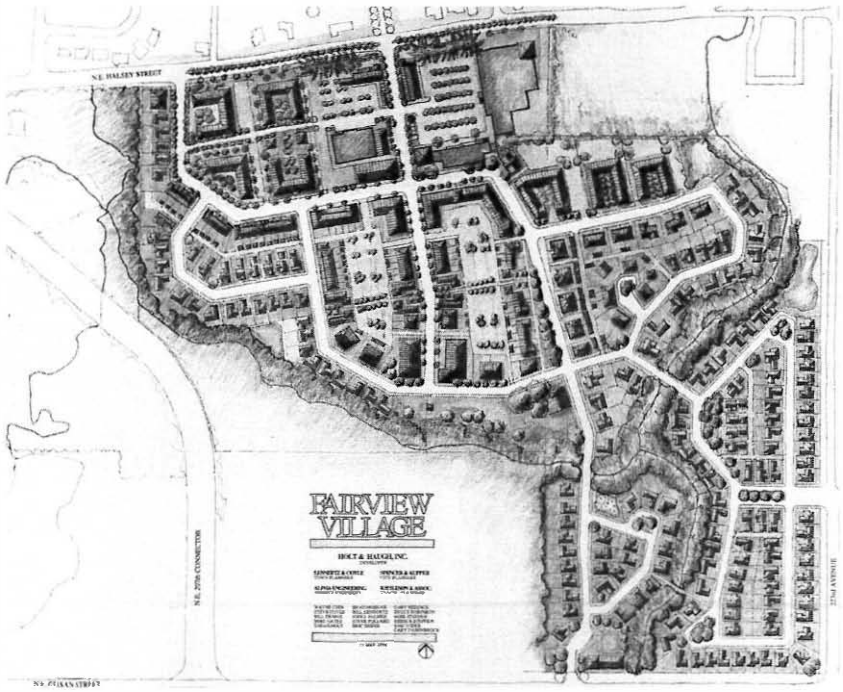
Porches are a human-scaled design element that connects the public and private realms.

Designing streets that are balanced for pedestrians, cyclists, and motorists promotes the development of community through the informal meeting of neighbors. Neighborhood safety is improved, since neighbors can more easily come to know one another and watch over each other's homes.

Case Studies

The following two examples describe recent Oregon building projects that incorporated smart development principles into their designs. Fairview Village was a large parcel "greenfield" project, and Weistoria Village in Bend was a smaller, "infill" project.

Fairview Village, Fairview, Oregon



Developer: Holt and Haugh

PROPERTY DESCRIPTION:

- 137 acre undeveloped parcel within the City of Fairview
- Existing zoning: light manufacturing

CONCEPT:

- A compact village that mixes uses either within the same area, on the same street, or in the same building.
- A connected street network with a hierarchy of designs ranging from 26 feet of pavement with parking on one side to 32 feet with parking on both sides. Parking allowed on all streets, except alleys (16-foot right-of-way).
- Multiple homeowner associations, design guidelines contained in the conditions, covenants, and restrictions.
- Uses include: retail, office, public uses (city hall, post office, parks), attached multifamily, detached single family, attached single family.

DEVELOPER'S PROGRAM:

136 detached single family units
50-60 accessory units
14 townhouses
110 rowhouses
26 duplexes
252 apartments
154,400 square feet of retail space
176,200 square feet of office space
40,000 square feet of public buildings
4.5 acres of natural open space
3.5 acres of formal parks
13.5 net units per acre

The 137-acre site within the city of Fairview was zoned light industrial when developers Holt and Haugh purchased it. There were no provisions within the city's zoning code for a mixed-use, mixed-density village. A rudimentary planned unit development provision allowed for transferring of density and flexibility of lot sizes, but the density and single use limitations of the city's subdivision code still governed. The major code obstacles were:

- Wide street standards based on conventional large suburban block sizes, with no provisions for curb-to-curb widths narrower than 36 feet;
- No provisions for alleys, mixing of uses, or accessory units;
- Minimum front setbacks of 20 feet, with side setbacks of 15 feet, making small lot development unfeasible; and
- Minimum lot sizes that discouraged compact housing types.

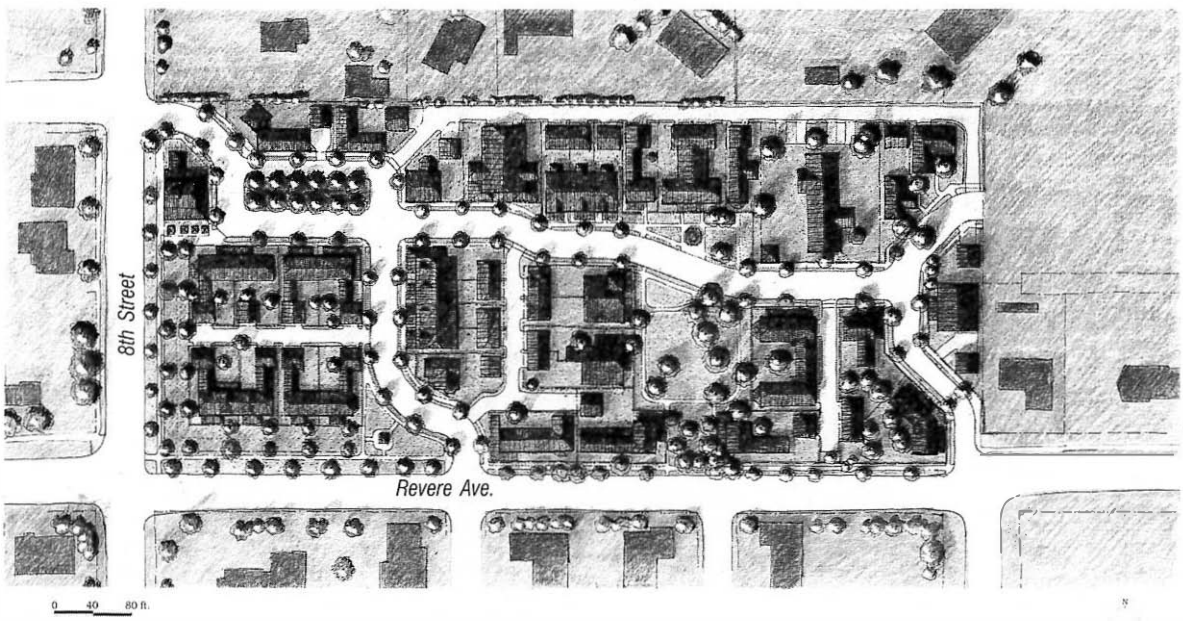
Since more than 20 variances would have been required to fulfill the plan, Holt and Haugh asked the city to amend their comprehensive plan to provide for a special plan district. The developer proposed that the company assume the burden of writing the new village zoning ordinance and that they fund an additional staff planner to handle the transition. To their credit, the city was open to the new zoning concepts and came to agreement with the developer. The developer estimates to have incurred a 5 percent premium accredited to these extra efforts to remove obstacles to their unique, smart development.

The new "Fairview Village Special Plan District" features:

- Allowance for single family, accessory units, village townhomes, village apartments, village mixed use (apartment or office over retail), village offices, public uses, and village commercial;
- A hierarchy of streets, including alleys, and curb-to-curb distances as little as 26 feet with parking;
- Basic architectural controls including placement of garages—in most cases behind the front of buildings;
- A riparian buffer overlay and conservation easement limit within a 50 foot horizontal distance from Fairview Creek which establishes the same as building setback;
- A policy for public parks to be developed by and reimbursed to developer;
- Provisions for all storm water to be captured on-site.

Village Weistoria, Bend, Oregon

Developer: Village Development, Inc.



The Village Weistoria plan features a street network designed to connect with the surrounding neighborhood. The plan also preserved several old growth trees.

PROPERTY DESCRIPTION:

- Seven acre lot within the city of Bend (infill)
- Existing zoning: single family residential (RS zone), 2.5 to 7.3 dwelling units per acre
- Buildings on site: single family house, farm buildings

CONCEPT:

- Compact village that provides modestly sized, attached and detached single family housing within a walkable neighborhood, and includes parks and a community center.
- A connected street network with a hierarchy of designs ranging from 27-foot widths with parking on one side to 27-foot widths with parking on both sides and one lane of traffic. Parking to be allowed on all streets.
- Homeowner organization, design guidelines contained in the conditions, covenants and restrictions.
- Desired uses included: retail buildings, offices, community buildings, detached and attached single family residences, and accessory units.

DEVELOPER'S PROGRAM:

42 attached and detached single family units
4 accessory units
2600 square feet of public building
3.8 acres of public parks and roadways
14 net units per acre
Neighborhood "depot"—post office, meeting room, studio apartment

The existing zoning for the property was a major obstacle to this plan. It allowed single family residential only, with a minimum lot size of 6000 square feet per unit. Also required were 32-foot wide streets within a 60-foot right of way. No convenience commercial (e.g., corner store), light commercial (e.g., barber shop), or any office use was permitted outright.

In order to achieve the higher density and mix of housing types envisioned for the project, the developer avoided a zoning variance by applying as a planned unit development. The developer also spent considerable time with the planning staff, the residents of the adjoining neighborhood, and the community explaining the project's goals and traditional neighborhood planning principles in general. He was able to show a majority of people the benefits of mixed use, mixed densities, connected streets, and moderated street design.

The primary obstacles to the project were:

- Additional time spent on education and clarification in order to prevent future holdups;
- Legal fees associated with a planned unit development;
- Subjective code standards that were left open to interpretation by city staff—certain guidelines were not clearly stated or understood.

Obstacles to Smart Development Principles

Despite the many benefits of smart development, this building pattern faces a variety of obstacles.

Though many of Oregon's older neighborhoods exemplify smart development, today's development industry is largely unfamiliar with the concept. Current regulatory and financial systems do not accommodate smart development, resulting in barriers that cause delays and increase costs. The cumulative effect of these barriers may frustrate developers who are trying to do smart development, and may discourage others from pursuing projects in the future.

In deciding which projects to pursue, developers assess how various obstacles will hinder their ability to complete the project on time and with a sufficient return on their investment. Since regulatory and financing systems primarily serve single-use, conventional, and suburban development patterns and designs, builders often stick with this model, choosing what the existing system encourages rather than spending time and money trying to overcome barriers to smart development. One of the objectives of the Transportation and Growth Management Program and Livable Oregon's efforts has been to work with industry leaders to break down barriers and develop strategies to encourage more livable communities.

Governor's Symposium on Smart Development

On November 20, 1996, Livable Oregon, Inc. hosted Governor John Kitzaber's Symposium on Smart Development. The Governor's Symposium focused on barriers or obstacles that can make smart development projects more difficult or costly to build. These barriers can affect whether or not developers are able to successfully complete a project, and may discourage them from pursuing smart development in the future. Based on interviews with developers from across Oregon, five common categories of barriers were identified and discussed at the Governor's Symposium.

1. Local Regulations

Poor or antiquated development codes (subdivision and zoning), lengthy approval processes, and excessive public facilities standards can discourage smart development. These codes, standards, and processes are based on conventional development patterns and normally do not have the flexibility to accommodate smart development, with its smaller lots, higher densities, mix of uses,

narrower streets, and emphasis on providing a range of transportation options. In many cases, smart development projects require variances from development codes which can lead to costly delays.

Other identified barriers to smart development included:

2. Market Conditions
3. Development and Process Costs
4. Financing
5. Community Involvement

A full discussion of these other barriers is contained in Livable Oregon's report on the conference, reprinted in the appendix to this handbook.

Code Obstacles to Smart Development

Code obstacles to smart development are the focus of this handbook. These obstacles can interfere with smart development principles, often in different and sometimes subtle ways. Some obstacles are specific code requirements that may be excessive or prohibit smart development practices. Others fail to support smart development by their absence.

Overarching these impacts are inherent delays in the land use approvals process. Process delays can include burdensome variance processes, discretionary design review, or excessive numbers of public hearings. Tracy Watson, the development process manager for the city of Austin, Texas, has said that without a proposed "traditional neighborhood development" ordinance, current code would require a smart development project to obtain 30 or more variances to gain approval. These kind of obstacles discourage developers from trying new approaches and encourage continuation of conventional development patterns.

Code obstacles are the focus of this handbook.

The following is a brief discussion of code obstacles to smart development, grouped by the five principles.

1. OBSTACLES TO EFFICIENT LAND USE

Many smart development projects are infill development, often on irregularly shaped parcels that may have an unusual shape or slope or other constraints that have caused developers to pass over the land in the past. Most codes rely on exact dimensioning of lot width, depth, and size. Most zones also have maximum density and minimum lot area requirements. These combine to produce a homogeneous development pattern that may not lend itself to the physical characteristics (i.e., slope, wetlands, riparian areas) of a particular parcel of land. Strictly applying these requirements to infill often results in fewer lots than if developers could cluster development or average dimension requirements within overall density maximums.

Smart development does not only occur on large sites as a single project, but may involve infill development on small parcels or redevelopment of adjoining parcels with different ownership. Many codes do not have provisions to allow coordinated development of a multi-parcel, multi-developer project.

Many development codes include outdated street design standards. These standard often require street widths too great for the traffic volumes they will carry, especially on local residential streets. When land is at a premium within an urban area, building excessively wide streets precludes the use of that land for housing or for amenities such as wider sidewalks or open space.

Finally, many codes include parking standards that require an excessive amount of land for parking. Standards are often based on models that assume every trip, no matter how short, will be made by car. For commercial areas, this results in large, separated parking lots for every building. This situation is especially problematic for smart development projects in neighborhood centers—designed for pedestrian friendliness and independence from the automobile. Furthermore, many codes do not have provisions that address shared parking arrangements or allow coordinated parking management plans.

2. OBSTACLES TO FULL UTILIZATION OF URBAN SERVICES

Smart development often includes increasing the amount of housing in close proximity to other neighborhood services, such as shopping or transit. Higher density uses existing infrastructure more efficiently and can reduce the need for more capital improvements, such as sewer lines or roads.

Under-building, or building significantly less than the maximum allowed density, is indicative of a common development practice: taking the path of least resistance. Many developers would prefer to build at the maximum density allowed, but propose fewer units in an effort to head off community opposition. Many development codes do not include provisions to require minimum densities or maximum lot sizes. The under-building that results means an inefficient use of existing urban services, including parks, schools, and police and fire protection.

Under-building is indicative of a common development practice: taking the path of least resistance.

Development codes often do not have the flexibility to allow developers to fully utilize existing urban services by mixing housing types. Attached units (duplexes, rowhouses, or townhouses) can make full use of services by accommodating more units in less space, while providing for a range of housing types within a neighborhood. For example, many single-family zones require twice as much lot area for a duplex as a single-family home, providing no incentive to include duplexes in a development. Minimum lot size and side yard setback requirements can also bar the construction of attached units. Smart codes allow a variety of housing types, while setting appropriate standards to ensure design compatibility.

Allowing accessory units—small secondary units associated with single-family homes—can incrementally increase densities within a developed neighborhood

while providing housing choices. These units, also known as "granny flats" or "in-law apartments," are often prohibited or must have a large enough lot to qualify for a second full-sized unit. Some communities allow accessory units but only if approved through a conditional use process, which can be a costly, confusing, and time-consuming process for a homeowner.

3. OBSTACLES TO MIXED USE

The typical zoning code segregates and separates residential, commercial, and industrial uses. While smart development does not necessarily mean mixing industrial and residential uses, it does support mixing commercial and residential uses—prohibited in most codes except through a lengthy planned unit development process. Mixed use of this kind is not new: towns and neighborhood centers have historically included housing, often above shops and businesses, that can provide a steady source of customers for local businesses, especially after 5 p.m. By the same token, limited retail in a residential area allows people to more easily walk or bike to meet their daily needs, reducing reliance on the automobile.

The typical zoning code segregates and separates uses.

Zoning codes also segregate different residential densities and housing types from one another. Rather than relying on design compatibility standards, communities often depend on oversized lots to buffer development, especially for attached units or multi-family apartment buildings. These practices also can lead to under-building: small buildings on large lots. For instance, one Oregon code requires a 100-foot building setback if a multi-family zone abuts a single-family zone, inevitably resulting in large parking lots straddling the zoning boundary. In another jurisdiction, the code requires the same lot area for a detached unit as for an attached one.

4. OBSTACLES TO TRANSPORTATION OPTIONS

Smart development results in land use patterns that encourage walking, bicycling, and riding transit as alternatives to automobile trips. Streets are the most prevalent public space in a community, but are usually designed for the near-exclusive use of the automobile. Wide streets with large turning radii, built primarily to accommodate cars, can preclude features such as wider sidewalks or bicycle lanes that serve non-drivers.

Also, in the past, development codes have rarely included limits on the length of cul-de-sacs or requirements for street connectivity that could eliminate pedestrian barriers and reduce out-of-direction travel. However, code changes that are required to comply with the state's Transportation Planning Rule address many of these needs and support smart development.

Finally, many communities fail to recognize the opportunity to increase density within a quarter-mile of a transit stop, the area where people are most likely to walk to ride transit.

5. OBSTACLES TO DETAILED, HUMAN-SCALED DESIGN

Opposition to new development often stems from justified concerns about compatible design.

Opposition to new development comes from not just more growth, but from justified concerns about compatible design. Many development codes lack design guidelines or adequate transitions between land-use zones that mitigate compatibility problems. Others lack incentives for good design, such as density bonuses for including amenities such as porches, bay windows, roof gables, or increased open space.

Many commercial zoning codes are written primarily to support the development of suburban shopping centers and malls. They encourage auto-oriented development with large setbacks from the street and expansive parking lots. While appropriate in some cases, these standards are often applied uniformly for all types of commercial development—a disaster for pedestrian-friendly neighborhood retail centers.

AN OVERARCHING OBSTACLE: THE DEVELOPMENT REVIEW PROCESS

A project of single-family detached houses—some with accessory units—and townhomes arranged around a small neighborhood commercial center would be prohibited outright in most codes. Gaining approval for such a project requires variances or a planned unit development approval, both of which can be so costly, time consuming, and burdensome that they deter most developers. Even communities with good design guidelines sabotage smart development proposals by involving them in a design review process that may be susceptible to subjective approvals. Integrating smart development principles into a code does not mandate them for all developments; instead, it creates the opportunity to employ them without a lengthy review process.

Strategies and Solutions

The table below outlines specific strategies that encourage smart development. All strategies are grouped according to the smart development principle from which they follow. Each strategy is accompanied by an obstacle, and a solution to this obstacle. In the section after the table, each row—strategy, obstacle, and solution—is explained in further detail, with real-world examples of how it can be done.

1. EFFICIENT USE OF LAND RESOURCES

	Strategy	Obstacle	Solution
1.1	Small Lot Infill Development	Excessive Lot Area Dimensions	Revise Setback Requirements, Minimum Lot Sizes
1.2	Infill Development on Large Lots	Inflexible Subdivision, Lot Area Requirements	Average Lot Size for Whole Development, Allow Flexibility to Preserve Natural Features
1.3	Coordinated Development	Coordinated Development Not Addressed	Specific Development Plans, Master Plans
1.4	Better Use of Deep Lots	Excessive Frontage and Multiple Access Requirements	Mid-Block Lanes, Interior Block Cluster Development, Flag Lots
1.5	Less Land for Streets	Excessive Street Design Standards	Adopt "Skinny" Street Standards
1.6	More Efficient Use of Parking Areas	Excessive Parking Requirements	Reduce Minimum Parking Ratios, Set Parking Ratio Maximums, Acknowledge On-Street Parking, Encourage Shared Parking

2. FULL UTILIZATION OF URBAN SERVICES

	Strategy	Obstacle	Solution
2.1	Achieving Planned Densities	Under-Building, No Support for Density Goals	Minimum Density Standards
2.2	Attached Units	Lot Sizes not in Proportion to Unit Sizes	Reduce Lot Size Requirements, Allow Single Family Attached in All Residential Zones
2.3	Attached Units	Lot Area Dimension Requirements (excessive side setbacks)	Revise Setback Requirements
2.4	Accessory Units	Excessive Minimum Unit Size, Density Maximums Too Low	Allow Accessory Units

3. MIXED USE

	Strategy	Obstacle	Solution
3.1	Mixed Use Buildings	Single Use Zoning, Separation of Uses	Allow Home Occupations and Live/Work Units, Density Bonus for Mixed Use Commercial/ Residential Buildings
3.2	Mixed-Use Neighborhoods	Single Use Zoning, Separation of Uses	Limited Commercial in Residential Zones, Allow Multi-Family Residential in Commercial Zones, Limited Retail in Industrial Zones
3.3	Healthy Commercial Districts	Separation of Uses, Proximity	Community Shopping Centers with Street Connectivity, Main Street Districts

4. TRANSPORTATION OPTIONS

	Strategy	Obstacle	Solution
4.1	Multi-Modal Streets	Street Design Standards Overemphasize Autos	Revise Street Standards, Promote "Skinny" Streets
4.2	Transit, Bike, and Pedestrian Connectivity	Physical Barriers or Out of Direction Travel	Cul-de-sac and Block Length Maximums, Internal Connectivity Standards, Sidewalk Requirements
4.3	Transit Supportive Development	Transit Supportive Development Not Addressed	Mandate Transit-Oriented Development Along Transit Corridor

5. DETAILED, HUMAN-SCALE DESIGN

	Strategy	Obstacle	Solution
5.1	Compatibly Designed Buildings	Too Abrupt Transitions Between Zones	Density Transitioning, Mid-Block Zoning District Lines, Building Height Limits
5.2	Compatibly Designed Buildings	No Design Guidelines for New Buildings	Incorporate Compatibility Guidelines for New Infill Construction
5.3	Pedestrian Friendly Streetscapes (Commercial)	Street Standards Emphasize Cars, Design Discourages Walking	Building Orientation, Parking Lot Placement, Allow Shared Access, 50%/80% Frontage Rule, etc.
5.4	Pedestrian Friendly Streetscapes (Residential)	Street Standards Emphasize Cars, Design Discourages Walking	Require Sidewalks, Limit Setbacks, Garage Placement, Lighting, Utility Placement, etc.
5.5	Quality Architectural Design	No Incentive to Provide Amenities	Density Bonuses for Amenities

1. Efficient Use of Land Resources

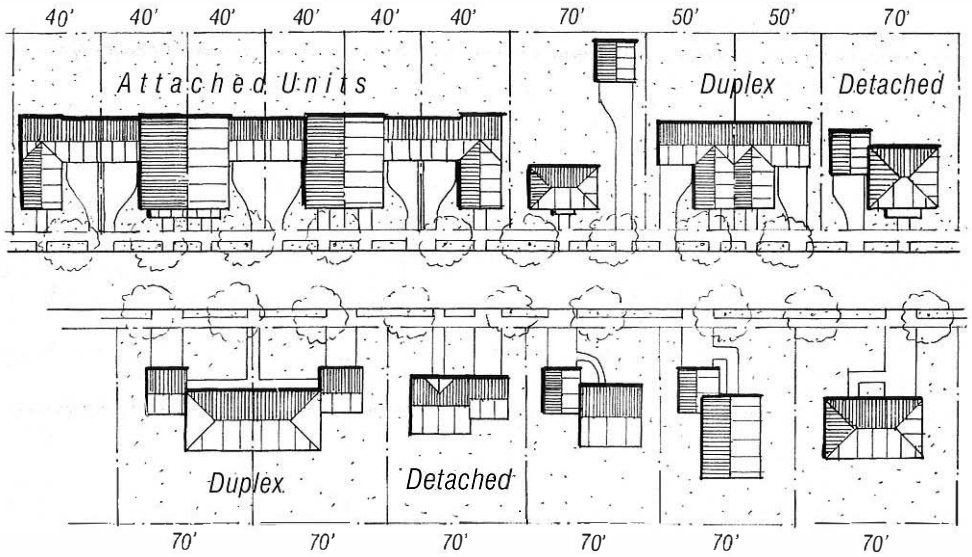
1.1

Strategy: Encourage Small-Lot Infill Development

Many residential neighborhoods, new and old, have been under-built because of circumstances of topography or history. Empty lots create gaps between neighbors, and buildable space at the end of the road sits overgrown and unused. Practicality and economic considerations push builders, today the same as 80 years ago, to place houses on the most standard, spacious, or accessible lots available. Buildable, lots that are smaller, irregularly shaped, or affected by slopes are often passed over in the first wave of construction. The goal of using all valuable land, especially in areas where development has already taken place, provides a strong incentive to fill in these gaps in the fabric of a city or town.

Obstacle: Excessive Lot Area Dimensions

Small or irregularly shaped properties stay unbuilt in part because local jurisdictions either require overly large setbacks from neighboring property lines, or forbid residential buildings on lots smaller than a certain number of square feet. If, for example, large side yard setbacks are required for a relatively narrow lot, the proposed house's width could be reduced to such a size that building it would no longer be feasible. Also, if the zoning code demands unnecessarily large minimum lot sizes for any construction to occur, building a house on an 8,000 square foot lot, spacious by most standards, may not be permitted if the code requires 10,000 square foot minimums.



(Top) Smart development standards applied. Mix of lot sizes, minimum front setbacks garages set back.

(Bottom) Conventional development standards applied. Uniform lot size (a disincentive to attached units), large front setbacks, garages in front of houses.

Solution: Revise Setback, Minimum Lot Size Requirements

(code example: Fairview, Oregon, appendix p. 1-2)

Revising setback and minimum lot size requirements reduces barriers to infill development without adversely affecting existing neighborhoods. In fact, new buildings on smaller lots can add to the diversity of housing types in a neighborhood, enriching its character and improving its affordability. Reductions in the setback and lot size requirements allow undersized lots to fill in with new housing, and also increase the potential number of housing units in an zoning area. The new guidelines should modify existing standards: for instance, the city of Milwaukie reduced its minimum lot width in a type of single-family zone from 70 feet to 50 feet, and reduced minimum lot size in a multi-family district from 5,000 to 3,000 square feet.

1.2

Strategy: Encourage Infill Development on Large Lots

For larger parcels of land, or for new subdivisions, efficient use of land calls for a neighborhood where every square foot is well designed and used to the utmost. Because of economies of scale, developers normally favor real estate where they can build a larger number of houses at one time. These parcels are ideal locations for innovation: for healthy, smartly developed neighborhoods providing benefits and choices to its residents.

Obstacle: Inflexible Subdivision, Lot Area Requirements

Though developers generally prefer sites where they can build many houses at once, overly restrictive, complex zoning codes or subdivision requirements can either create bland, cookie-cutter developments where every house is nearly the same, or discourage construction altogether. Strict lot area requirements result in predictable and relatively homogenous building types and do not encourage builders to avoid environmentally sensitive areas. In addition, uniform lot requirements tend to oversize lots associated with attached units or multi-family. In at least one Oregon city, the code requires the same area per unit for a individual house as for an attached one, i.e., 5,000 square feet for a single family home and 10,000 square feet for a duplex. This eliminates the land savings that draws builders to consider attached units in the first place.

Solution: Average Lot Size for Whole Development, Flexibility to Preserve Natural Amenities

(code example: Fort Collins, Colorado, appendix p. 35-36)

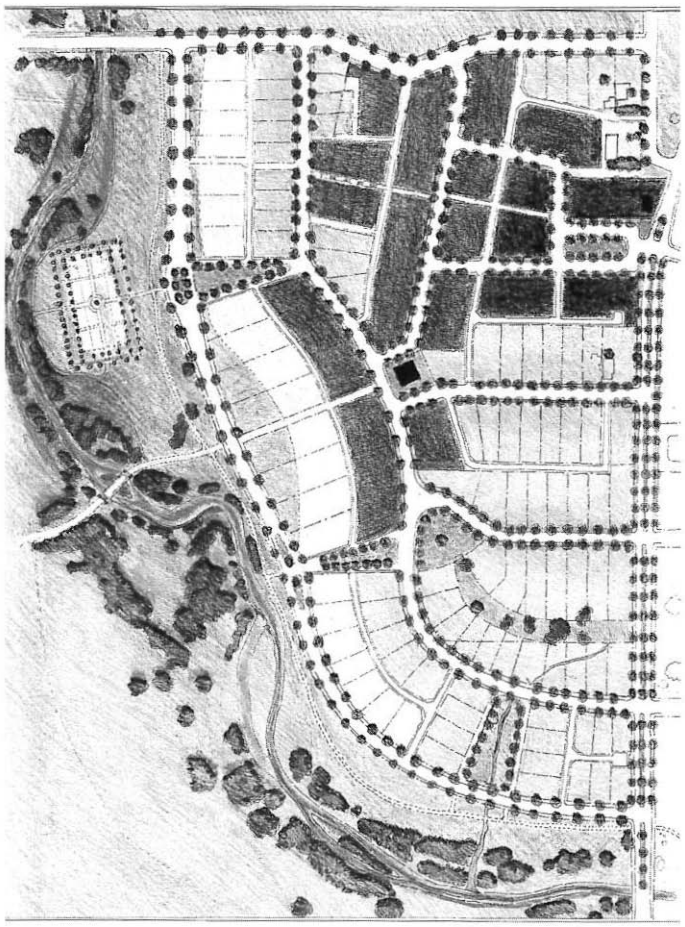
The ability to vary lot dimensions gives builders the necessary flexibility to vary housing type, providing greater market choice. Most codes rely on exact dimensioning of width, depth, and area to address neighborhood compatibility. A smarter route for promoting diverse housing types in a new development is to control what really matters: the average overall sizes of the lots. This enables

builders to build according to site conditions, and to mix together single and multi-family units. For compatibility's sake, subdivision and zoning codes should establish limits on the range of possibilities. For instance, codes could allow single family homes to mix with duplexes, but not to abut directly with large apartment buildings. A smart development zoning code achieves a dual goal: it allows flexibility for the developer to provide a variety of housing types while providing assurance to the public that buildings will be compatible with each other and with adjoining neighborhoods.

1.3

Strategy: Coordinated Development

Large undeveloped areas in Oregon are often comprised of multiple ownership. Different goals between property owners or simply a lack of communication can unnecessarily fragment new development. Establishing an overall specific or refinement plan in advance can ensure the area is built in a coherent fashion. These plans provide a framework for locating smart development features such as a connected network of streets, neighborhood parks, and mixed uses and densities. Specific plans provide certainty for all parties: the city, developers, and the neighbors. Since the overall plan has already passed city and neighborhood review, developers know what standards they must follow and spend much less time getting approval for particular elements of site design and construction. In turn, the plan provides a certainty for the city and the neighbors as to the quality of the development.



A specific plan or master plan—this one for the North Mountain neighborhood in Ashland—pinpoints the location of streets, building lots, parks, and open space.

Obstacle: Coordinated Development Not Addressed

A primary problem of growing cities and towns is piecemeal, uncoordinated development. Undeveloped land is often parceled into many separated holdings, each with a variety of sizes and configurations. If these parcels develop independently, it is very difficult to coordinate features such as an overall network of connected streets or neighborhood parks. Standard subdivision requirements that prescribe open space requirements and street connections may not go far enough, resulting in uncoordinated, patchwork development, rather than a coherent neighborhood.

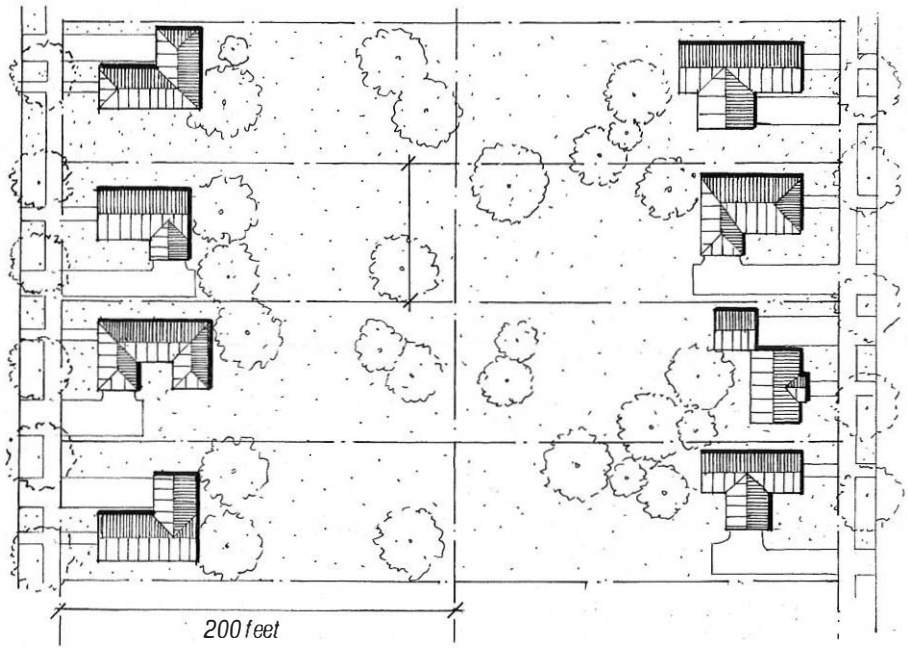
Solution: Specific Development Plans

(code example: Bend, Oregon, appendix p. 69-72; ORS 197.200, appendix p. 3)

In order to initiate a specific plan, the comprehensive plan must first be amended to allow for specific, geographically-defined planning areas. Nearby neighbors and landowners within the planning area should be involved in the planning process. Specific plans regulate the location of streets, parks, and open space, prescribe allowed uses, and can control building placement and design. Street and public facility location can be contentious among the landowners. Also, planning streets that guarantee connectivity and allow individual owners to develop independently can occasionally be difficult, requiring two or more owners to develop together. For example, to maintain connectivity between landholdings, streets should either connect to those of the neighboring parcel or "stub-out" to allow for future connections.

1.4

Strategy: Better Use of Deep Lots



Existing houses on deep lots.

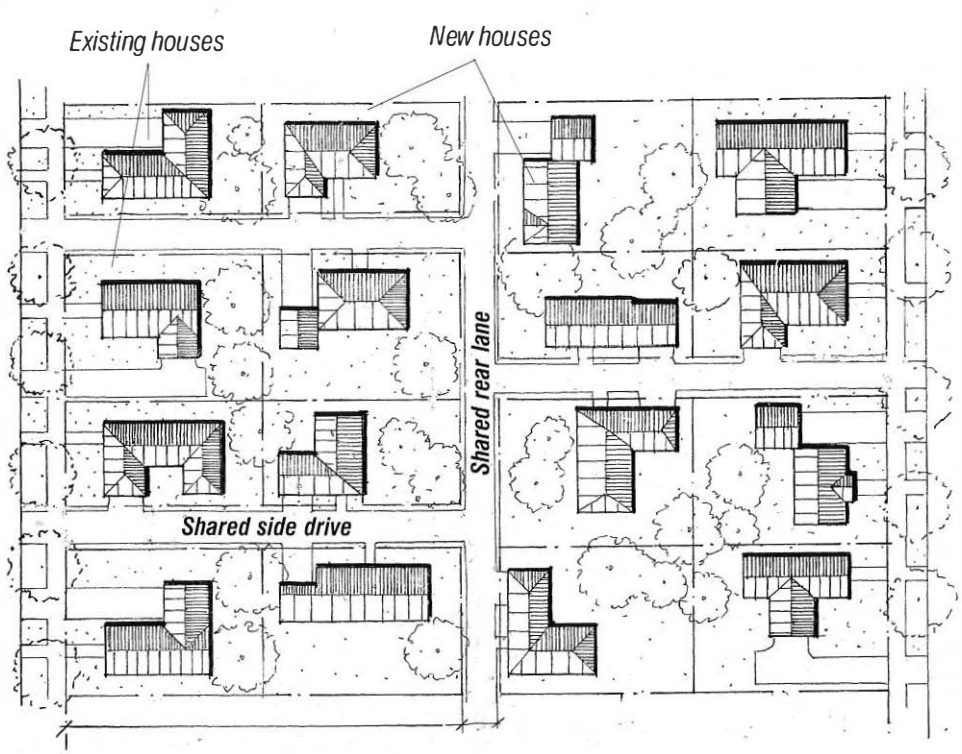
In some areas, building lots in existing neighborhoods may have standard widths but be unusually deep compared to other lots in the area. Essentially unused space at the back of a lot provides an ideal place for infill development, especially since this kind of growth brings a relatively small impact to an existing neighborhood. When correctly controlled, adding residential units on deep lots can bring a greater choice of housing types to a neighborhood and make more efficient use of land.

Obstacle: Excessive Frontage and Multiple Access Requirements

Unfortunately, many codes have requirements that effectively make developing deep lots impossible. Requiring a minimum amount of street frontage for each residential unit, for example, keeps the frontage-less land at the back of a deep lot empty. In addition, access requirements sometimes require each unit to have its own driveway, meaning that adding a unit would require adding a second driveway onto the street, resulting in wasteful and unsightly paving taking up too much of the lot's street frontage and creating unsafe traffic conditions.

Solution: Mid-Block Lanes, Interior Block Cluster Developments, Flag Lots

(code example: Milwaukie, Oregon, appendix p. 4-6)



Mid-block infill development using new network of interconnected lanes.

For areas that have consistently extra deep blocks, say of 300 feet or greater, a series of interconnected mid-block lanes could be provided to serve the new residences. Through a specific or refinement plan, a 10-foot easement on each side of the rear lot line could allow for a 20-foot-wide lane to connect the mid-block units to the existing street system.

Another solution to tap this land resource is an interior block cluster development, a design that deals with an irregularly shaped parcel of land surrounded by existing residences. A single, connecting lane can extend from one side of the block to the other with residences clustering around the center of the block. Each building would have street access via the new lane, without the overwhelming effect of more driveways onto the main neighborhood street. A new 42-unit infill project in northeast Portland will include a mid-block lane, making the most of the available land.

Lastly, development codes can be revised to allow for "flag lot" residences at the back of very deep lots, without adding lanes, by simply permitting shared driveways and changing street frontage requirements. Since this solution does not increase connectivity, it should be the last choice among the available infill options.

Strategy: Less Land for Streets

When land is at a premium, building neighborhoods with excessively wide streets precludes using that land for more productive and profitable uses. Each square foot of land paved over for the purpose of automobile travel is a square foot made unavailable for a sidewalk, a yard, floor space in a house or store, or open space. Smart development demands that wasted space be captured, and one of the easiest places to find that wasted land is in streets.

Obstacle: Excessive Street Design Standards

Often, street standards for residential neighborhoods are based on outdated assumptions of possible traffic volumes or the needs of atypically large vehicles. Street widths often are much greater than is needed for ordinary use, not only wasting land but encouraging speeding cars and cut-through traffic. Furthermore, since local governments often have responsibility for constructing and maintaining streets, greater than necessary standards drive up municipal costs. Many streets are designed primarily for conditions that may occur only infrequently or possibly not at all on that street, making it an inappropriate environment for the people who use it on a daily basis.

Solution: Street Standards Appropriate to Street Function, Adopt "Skinny" Street Standards

(code example: Eugene, Oregon, appendix p. 7-18)

In a city of Portland field test, a fire truck passes on a 20-foot-wide street.

New guidelines from the Institute of Transportation Engineers state that a "street should be no wider than the minimum width needed to accommodate the typical and usual vehicular mix that the street will serve." This common sense strategy means that residential streets should be built at a variety of widths, depending on their function and hierarchy in the street system. Moreover, research has shown the necessary width of a street can be even narrower than conventional wisdom would suggest. The City of Portland discovered that after crossing a certain threshold, street widths can be dramatically narrowed with no loss of functional performance. Through field testing, the city also discovered that the space needed for emergency vehicles was less than previously thought. This research resulted in the adoption of "skinny" street standards that call for streets that use land sensibly, require less money to build, and offer a friendlier environment to pedestrians and residents.

Strategy: More Efficient Use of Parking

Space required for the storage of automobiles is a major drain on precious land resources. Especially as cities and towns grow, making land more valuable, property previously devoted to parking becomes attractive for more productive uses. The amount of parking required by a project, either by the code or by the market, is the biggest determining factor for a building's "footprint" on the site and the number of square feet in the finished structure. A single parking space can require up to 300 square feet of land, the same amount of floor space in a small studio apartment. Smart development encourages builders and planners to find ways to reduce the need for parking, to make the most of space devoted to parking, and to minimize the impact of parking on neighborhoods.

Obstacle: Excessive Parking Requirements

Code requirements, both residential and commercial, usually demand that a significant amount of land be given over for automobile storage. For residential developments, parking ratios are set as high as two or more off-street parking spaces for every unit, regardless of unit size. Requirements for parking in commercial developments are often set at what can be expected at the busiest time of the year, creating paved over, unused land 360 days out of the year. Excessive minimum parking requirements, but no maximum requirements, or limits, result in an inefficient use of land resources.

Solutions: Reduce Minimum Parking Ratios, Establish Parking Ratio Maximums, Allow On-Street Parking, Encourage Shared Parking

(code examples: Eugene, Oregon, appendix p. 19-21; Fort Collins, Colorado, appendix p. 22; Olympia, Washington, appendix p. 23-25)

Reducing minimum parking ratios allows builders of commercial structures the opportunity to do more with the recaptured land, such as landscaping or placing more square footage within the new building. Reducing the minimum parking ratios can create tremendous savings for the property owner, in both land and development costs. For example, constructing a 100,000 square foot building with a parking ratio of three spaces per 1,000 square feet of building, rather than four spaces per 1,000, saves almost an acre of usable land. In many commercial areas today that acre could be worth $800,000.

In growing areas, setting a parking ratio maximum, or ceiling, helps hold down the amount of land given over for automobile storage. An upper limit forces builders to build only as much parking on the site as they really need, and encourages closer study of parking supply and demand. More land-efficient parking methods—public shared lots, carpool spaces, structures—could be exempt from the parking ceiling requirement.

Many commercial areas, recognizing the importance of parking, have benefited from a carefully thought out parking management plan. A coordinated effort between businesses can reduce the need for unnecessary parking and open up more land for other uses. Such a plan optimizes the use of existing lots, encourages shared parking, and provides incentives to use modes other than the car. Businesses and planners should also acknowledge on-street parking as a valuable resource, primarily for its low-impact ability to store customers' cars, and also as a tool that slows traffic and provides a buffer for pedestrians. Codes can be modified to count on-street parking toward the minimum ratio required.

Diagonal parking on this main street reduces the need for parking lots, a savings for the whole community

Parking standards should be modified to allow cooperation between businesses. For example, a bank and a restaurant could take advantage of different peak demand times by sharing a common lot, or at least permitting access between lots.

Residential areas have also found innovative ways to manage parking. For instance, the manager of Ankeny Woods, a transit-oriented, multi-family development in east Portland, offers a cash "parking space rebate" to residents who agree not to own a car. If enough residents take advantage of the program, the project has been designed so that some of the land currently dedicated to car storage can be converted into a basketball court or playground for children who live in the complex. If enough programs like this succeed, future projects can plan more housing units on land that had previously been required for parking.

2. Full Utilization of Urban Services

2.1

Strategy: Achieving Planned Densities

Every new home in a city or town carries an associated cost of supporting public infrastructure—roads and sidewalks to get to it, sewer lines to carry waste away from it, and firefighters to keep it from burning down, to name a few. Smart development encourages people to live where these expensive public services already exist, rather than pushing at the edges of the urban area and creating new demand. Because of economies of scale, more residences within a prescribed area result in lower public infrastructure costs per unit. People living closer together can share the same sewer lines, roads, and other infrastructure, making better use of existing urban services.

Obstacle: Under-building, No Support for Density Goals

Because of a number of barriers, including regulatory or community opposition, neighborhoods and builders lose opportunities to build out fully, or they spread development out over a larger space than is necessary. Under-built existing neighborhoods can be dotted with empty lots, and new development may be under-built by creating large-lot development at very low densities. Such development (or lack thereof) makes poorer use of urban services than denser development for which facilities have been planned, built, and financed. Since infrastructure costs, to some extent, are spread out throughout the whole community, other neighborhoods end up partially subsidizing the infrastructure costs for under-built areas.

Many neighborhoods have density "deficits," that is, not enough people to support urban services such as a corner store, a full-time police officer, or an elementary school.

Despite the cost-efficiency for both local municipalities and for developers, denser development receives little support for several reasons. Codes may allow lower densities than are ideal, or communities may outright oppose the idea of higher densities. Ironically, many places where new residences could be accommodated with the lowest cost to public infrastructure are the same places where neighbors often strenuously oppose infill development. In fact, many of these neighborhoods have density "deficits," that is, not enough people live there to adequately support a full array of urban services such as a corner store, a full-time police officer, or a school. As a result, residents of low density areas must leave their neighborhoods to satisfy many of their everyday needs.

Solution: Minimum Density Standards

(code examples: Ashland, Oregon, appendix p. 26-27; Eugene, Oregon, appendix p. 28)

The first step to encouraging denser development, and the public savings that follow from it, is to set—or set higher—minimum density standards. Many codes only set a maximum level to provide a safeguard against overbuilding, but do not prevent developers from under-utilizing property. Minimum standards prevent building patterns that are expensive to serve with public infrastructure.

In setting a new goal for a minimum density for an area, planners should consider the surrounding densities, but not let this limit their possibilities. In Clackamas County, for example, developers have complained that although they would like to build higher density projects in some cases, ordinances do not allow more intense development than the adjoining, 1970s era, low-density neighborhoods. Density minimums in Oregon are not new: In 1985, Springfield adopted minimum density zoning in medium- and high-density residential areas to make their zoning consistent with their comprehensive plan. Nevertheless, setting a standard presents a challenge: one that is too low may result in undesirably sparse development, and one that is too high may deter builders from doing a project at all. Local planners and public officials should work with developers to set a number that is within range of market demand.

2.2

Strategy: Attached Units

Attached units, whether duplexes, rowhouses, or townhouses, make full use of urban services by accommodating more residents in less space than detached units, while still allowing neighborhood compatibility. The developer gains savings in land and construction costs, and the public benefits from a more efficient use of sewer lines, police patrols and the like. Attached units increase the savings on infrastructure even more than closely spaced, detached units since attached housing can shares resources like a single sewer connection or driveway. As infill in neighborhoods of predominantly single-family detached homes, duplexes and townhouses can add variety to the housing types without substantially changing neighborhood character.

A new duplex fits comfortably with its older, single, detached neighbors. Similar massing and de-emphasizing garage doors aids building compatibility.

Obstacle: Lot Sizes Not in Proportion to Unit Size, Attached Units Not Allowed

Code requirements sometimes set out strict standards for the minimum lot size per unit. This view assumes all houses in a neighborhood will be detached single-family homes, creating a major roadblock for the building of attached units. If each residence is required to sit on its own fixed-size plot of land, builders have no incentive to use less space or create more units with attached housing.

In some communities' codes, even duplexes are classified as multi-family housing, and as such, forbidden in single-family zones. This shortsighted approach disregards the benefits that well-designed attached housing can bring to a neighborhood.

Solution: Reduce Minimum Required Lot Size, Allow Single-Family Attached in Residential Zones

(code example: Fairview, Oregon, appendix p. 29-30)

Smaller lots overall and more flexible requirements for attached housing in particular will help encourage denser development. A smaller minimum lot size allows the maximum number of units to be built, or at least gives greater choice to builders in making the decision.

Furthermore, codes could be modified to allow single-family attached housing in all residential zones. Corner lots are especially appropriate locations for attached housing within a neighborhood of mostly detached houses. If carefully designed, the impact of attached housing on existing neighborhoods is small and could be permitted outright, without triggering any kind of variance or review process.

2.3

Strategy: Attached Units

See the benefits of attached units discussed in Strategy 2.2.

Obstacle: Lot Area Dimensions (excessive side yard requirements)

Another barrier to attached housing is building codes that require side setbacks for all buildings, making the attachment of two units impossible. As a round-about way of addressing neighborhood compatibility, codes usually rely on exact dimensioning of lot width, depth, and area. This allows only one type of housing to be feasible. For infill, attached units are especially attractive on unusual or irregular lots that are slightly larger than the average, but less than two full lots. If all units are required to have 10-foot setbacks from each other

and from adjoining property lines, a builder would have to give up on the idea of a slightly wider duplex and instead construct a single house, effectively under-building the lot. Overly large setbacks can overwhelm an already tight site plan.

Solution: Revise Setback Requirements

(code example: Eugene, Oregon, appendix p. 28)

Setback requirements, particularly side setback requirements, should be revised so as not to implicitly forbid attached housing. Such revisions offer developers a wider range of choices when deciding what kind of housing to build on a site, and make the prospect of attached housing more attractive. In addition, smaller lot sizes eliminate the owner's need to maintain a part of a lot for which there is relatively little use and could, in some circumstances, increase privacy.

Ultimately, code requirements for setbacks should be proportional to the lot size and the proposed building. Excessive setbacks encourage less living space devoted to people and more space devoted to grass and asphalt.

2.4

Strategy: Accessory Units

Accessory unit over a garage. The unit is limited in size and is architecturally compatible with its neighbors.

An accessory unit is a small, secondary unit on a single family lot, usually the size of a studio apartment. The additional unit could be above a garage or in a portion of an existing house. These spaces allow for a different housing choice within a typically homogenous neighborhood. It can give the homeowner a place for a family member, such as an elderly parent, to live independently while maintaining a connection to the household. The accessory unit also could be rented out as a studio apartment, the income dedicated to paying the mortgage of the primary household. A high level and quality of management is assured by the fact that homeowners themselves oversee the accessory units. While providing benefits to individual homeowners, mixing this kind of less expensive housing into established neighborhoods also benefits the whole area by reducing the demand for large apartment projects and providing greater choice.

From the Irvington neighborhood in Portland to Pacific Terrace in Klamath Falls, accessory units have existed compatibly in single-family and mixed-use neighborhoods in Oregon for many years, adding diversity to established areas.

Even in exclusive residential communities such as Del Mar, California, accessory units in single-family neighborhoods have almost become the norm rather than the exception.

Obstacle: Excessive Minimum Unit Size, Density Maximums Too Low

Most codes either forbid accessory units outright or make them a conditional use, a difficult barrier to overcome. If accessory units are not addressed specifically in the code, often other regulations effectively prevent them, such as minimum unit size or density maximums. If a single family zone requires all residences to be have at least 1,500 square feet of floor space, creating a 500 square foot accessory unit is out of the question. If the maximum neighborhood density is so low that no more units of any kind are permitted, a homeowner who would like to build an addition to his house to accommodate a student or a relative would not have that option.

Solution: Revise Requirements for Unit Size, Densities to Allow Accessory Units

(code example: Sumner, Washington, appendix p. 31-32)

Changing the regulatory requirements that either explicitly or effectively bar accessory units is the first step to encouraging their construction. The most obvious trouble spots in the code are normally connected to minimum unit size, maximum allowable densities, setbacks, and access requirements. Additionally, compatibility requirements should be added to ensure an easy fit with the neighborhood. The keys to compatible development of the units include: owner occupation of the primary unit, unit sizes of around 500 square feet, access and/or parking provisions, and careful window placement to aid privacy.

3. Mixed Use

3.1

A cafe live/work unit in Bend is a village scale building with the main entrance facing the street and parking placed behind.

A more urban unit in a neighborhood center in northwest Portland

Strategy: Mixed Use Buildings

Mixing uses within buildings—a repair shop with an apartment above, or an accountant who both lives and works in his home—combines more activities together in the same area and reduces the need for people to drive. Integrating housing with other uses also increases neighborhood safety by maintaining activity in residential areas during the day, and in commercial centers after 5 p.m. A small business, such as a cafe or a corner store, can add to the quality and convenience of a residential neighborhood.

Obstacle: Single Use Zoning, Separation of Uses

The first cases of zoning separated uses, such as preventing the mixing of textile factories or hog farms with residences. Over time, zoning laws expanded the number of distinctions between uses, resulting in more and more segregation until virtually all types uses were separated from one another. Most residential areas do not allow stores, offices, or even other kinds of residences within their zoning districts.

Solution: Flexibility in Residential Zoning, Density Bonus for Mixed-Use Commercial/Residential Buildings, Allow Home Occupations

(code example: Fort Collins, Colorado, appendix p. 33-34)

Allowing mixed-use buildings if they are forbidden, and using density bonuses to encourage the construction of new ones are two methods that promote mixed use. For builders or renovators interested in smart development, a mixed-use zone offers some exciting opportunities.

A "live-work" unit, a limited business operating on the first floor of a primary residence, is a good way to integrate uses into a homogenous neighborhood. The ability of someone to operate a small business on the same site as one's residence can be a benefit to the person and the neighborhood in many ways: it eliminates a daily commute, it allows parents to be home more often, it adds to the safety of the neighborhood by having someone home during the day, it can buoy up a business that could not afford rent in a commercial district, and in more concentrated areas, it can activate neighborhood retail locations. In fact, live-work units were the beginning of many great shopping streets, including Portland's Northwest 23rd Avenue, and Newbury Street in Boston, Massachusetts. These residential streets incubated small, home-based operations that eventually matured into viable, stand-alone businesses.

For live-work units to thrive, certain guidelines and controls should be applied: a small or zero front-yard setback, an area of operation no larger than around 1250 square feet, a main entrance that faces the primary street, a limited number of employees, and no more than four off-street parking spaces for the business and two for the residence.

3.2

Strategy: Mixed Use Neighborhoods

Smart development combines many activities in the same area, reversing the pattern of single-purpose neighborhoods. Commercial, retail, education, recreation, and residential uses commingle and benefit from each other's energy. By bringing different services closer to housing, mixed use neighborhoods also offer the option of walking or biking to school, shopping, or work, and thereby reduce the amount of time people spend driving.

This corner store in Ladds Addition in Portland fits in the neighborhood by maintaining a residential scale and limiting its operations.

Obstacle: Single Use Zoning, Separation of Uses

Zoning, originally a tool to keep noxious uses separate from residential areas, gradually evolved into a system that keeps every aspect of daily life separate from every other. Work, shopping, school, and home are all divided from one another. Under the strict mandate of many residential zoning codes, a corner store is categorized as an unacceptable incursion into the neighborhood, as noxious and damaging as an oil refinery. Likewise, people are forbidden from living in commercial areas, leaving downtown or main street districts desolate after regular work hours.

Solution: Limited Commercial in Residential Zones, Multi-Family Residential Allowed in Commercial Zones, Limited Retail Allowed in Industrial Zones

(code example: Fort Collins, Colorado, appendix p. 35-40)

Several basic land use elements are necessary to support smart development, all of them dealing with the mixing of uses.

In residential areas, allowing limited retail services provides access to daily needs and potential for an informal social center or gathering place. In some older Oregon neighborhoods, neighborhood retail centers survive and allow nearby residents to more easily walk or bike to pick up a quart of milk, bring children to day care, or drop off dry cleaning. In order for such retail services to thrive and to remain compatible with neighborhood character, the following guidelines should be followed: commercial use limited to the ground floor; a building footprint no larger than 2500 square feet; on-street parking required in front of the building; the main entrance facing the primary street, off-street parking limited to five spaces for the commercial use; limited hours of operation (e.g., to between 7 a.m. and 10 p.m.); no drive-through businesses, and possibly prohibitions on the sale of carry-out alcoholic beverages.

Neighborhood retail centers allow nearby residents to walk or bike to pick up a quart of milk, bring children to day care, or drop off dry cleaning.

Conversely, mixing certain types of housing into commercial zones can inject life into business districts. Multi-family housing in commercial zones should be allowed as a way for residents to reduce car travel for all daily activities, as well as a prime location for senior housing. Permitting multi-family buildings in a commercial zone allows developers to respond to several markets simultaneously, and broadens their ability to respond to changing market forces. For instance, a developer of a new Safeway supermarket in the Rose City Park neighborhood of Portland used a corner of the large lot to build senior housing that has responded well to the market. However, single-family, detached housing should not be allowed in commercial zones, since such an influx of housing would effectively "downzone" the area and harm the commercial vitality of the business center; new housing in commercial areas should be limited to multi-family dwellings.

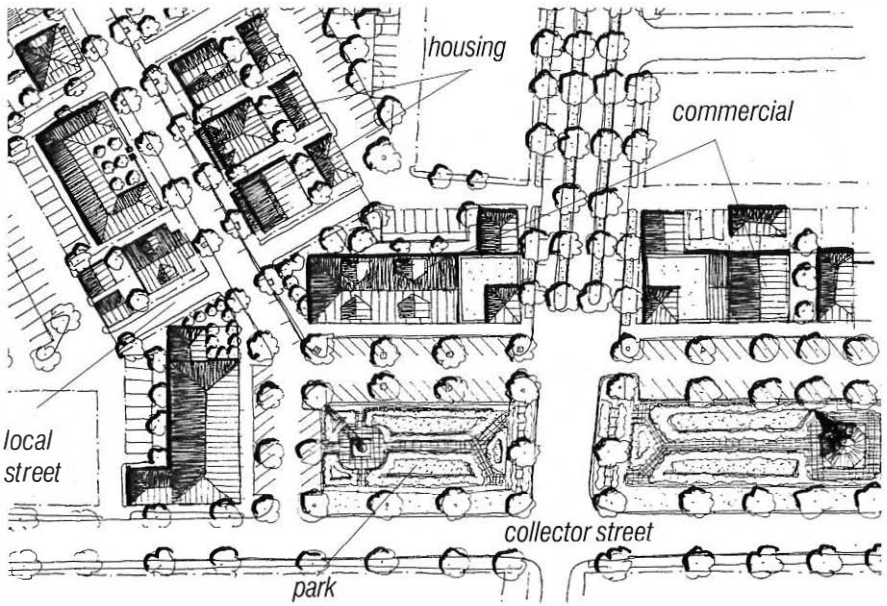
Industrial zones also can permit limited commercial activity, under certain circumstances. As employment centers, industrial areas teem with workers during the day, people who would benefit from amenities like a small scale store, lunch counter, or bank. Even small motels for visiting business people may be acceptable. Such businesses can satisfy some of the workers' needs without forcing them to drive ten miles to the nearest commercial zone just to buy a sandwich.

Strategy: Healthy Commercial Districts

Neighborhood commercial districts, by mixing uses within general areas, contribute to the livelihood of a community and reduce the need for long, frequent automobile trips. Healthy small-scale commercial districts give a unique identity and character to the surrounding area, creating a places of local interest and pride where people can feel comfortable shopping or strolling.

Obstacle: Separation of Uses, Proximity

A great deal of new post-war development has divided uses so dramatically that there is no space for neighborhood commercial areas between the large tracts of single-family houses. Some existing neighborhood commercial districts have lost customers as a result of the boom in large shopping malls and "big box" retailers, which cater exclusively to people arriving by automobile. Development codes actively promote the siting of big chain stores near highways since they are located in commercial zones, but at the same time they often discourage new small businesses placed closer to consumers, within existing neighborhood commercial districts.



Traffic on the abutting collector streets supports a neighborhood commercial center, while pedestrian friendly routes are available for residents of the attached neighborhood.

Solution: Community Shopping Centers, Main Street Districts

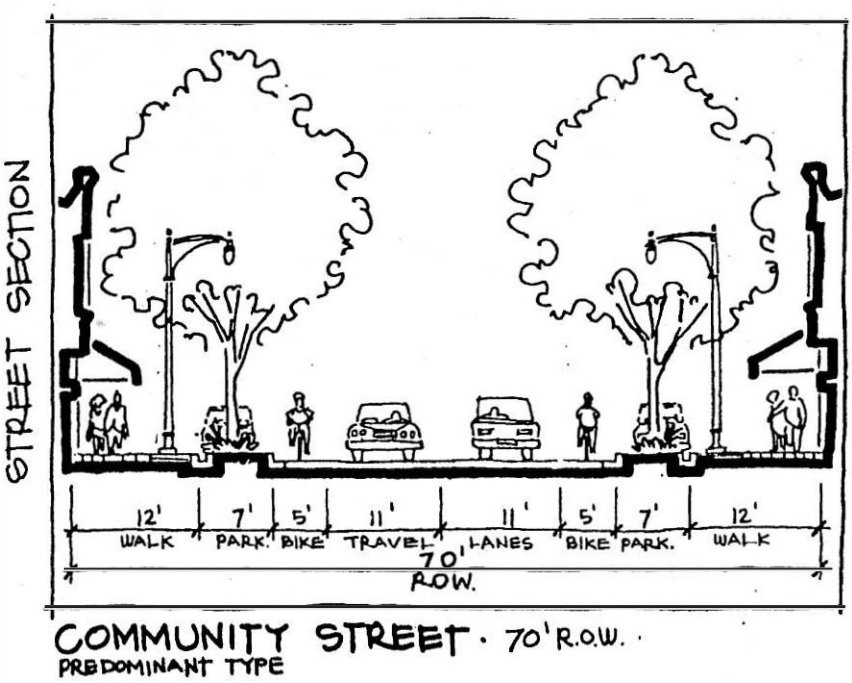
(code examples: Eugene, Oregon, appendix p. 41; Ashland, Oregon, appendix p. 26-27)

Adjusting standards to allow for commercial activity to exist and thrive closer to the source of its customers is smart both for merchants and for municipalities. Building on successful elements of existing community shopping centers and main street districts helps keep mixed use areas viable; supporting new business development in areas that are potentially mixed use has the same effect. By changing codes that only permit new commercial development in single-use commercial zones, planners open the door for new development in older commercial districts, which are normally closer to residential neighborhoods. If new commercial development chooses a site next to a residential area, planners should take full advantage of their proximity and should mandate connectivity between the two areas.

4. Transportation Options

4.1

Strategy: Multi-Modal Streets



Smart development depends on people having a range of transportation options to get where they need to go, and just as importantly, infrastructure on which to carry out these options. Streets are the most prevalent of public spaces, touching virtually every parcel of private land. If people choose to walk or bike on neighborhood streets, they should feel welcome and safe, just as much as people who choose to drive. Streets designed with many different users in mind will encourage non-motorist travel, bettering the health of the community and making it more livable. Without a comfortable and safe street environment for all users, people will continue to rely on the car for every trip to and from the home, making many of the other smart development objectives difficult to achieve.

Obstacle: Streets Designed Exclusively for Cars

Street planners have traditionally followed standards that focus too narrowly on one category of user—the driver—at the expense of other users: pedestrians and cyclists. The greater the emphasis on a narrow group of users for a particular street, the less appealing it will be for those who want to choose other ways of travel. The true challenge in making streets more genuinely available to everyone is to change the code restrictions and the thought patterns that build streets for cars, then "accommodate" cyclists and pedestrians afterwards.

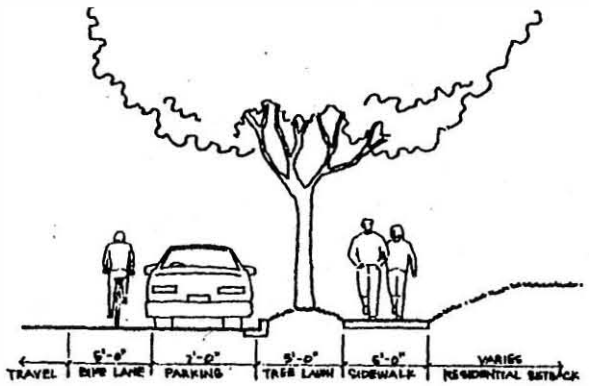
Car-dominated streets can restrict choices, especially for the 20 percent of our population who are too old, too young, or too poor to drive, by not allowing them the options to safely and conveniently get around on their own. Furthermore, those who do drive often tend to the transportation needs of non-drivers, such as chauffering children to the park or to school, or driving an elderly parent to the pharmacy.

Some specific code items that interfere with the goal of a multi-modal street system are: no sidewalk requirements, excessive street widths, excessive speed limits, no coordinated bike routes, poor pedestrian crossings, excessive curb return radii, and poor street connectivity.

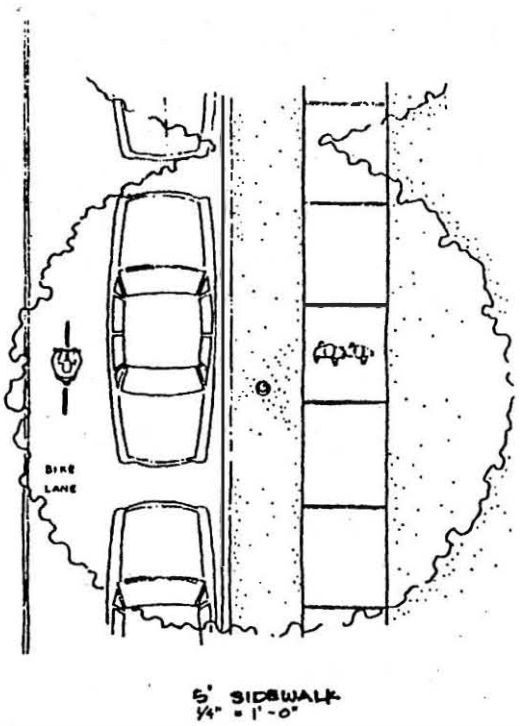
Solution: Revise Street Standards

(code example: Eugene, Oregon, appendix p. 7-18)

Often, street standards for a community must be totally reworked in order to accommodate smart development principles and make streets multi-modal. In other cases, existing streets and neighborhoods may already be well-designed for alternate modes. The key principle to follow in designing streets is balance—ensuring the safety and quality of the street environment for all users.



Street planners have a variety of tools to encourage multi-modalism, and local development codes should be modified to allow their use. Connectivity requirements, the concept of shared street space, "skinny" street standards, mapped-out pedestrian and bicycle networks, lower speed limits, and corner bulb-outs are some examples of things that make the streetscape more multi-modal. New street standards should be a combined effort of residents, emergency service providers, businesses, pedestrian and bicycle advocates, and other groups affected by the street.

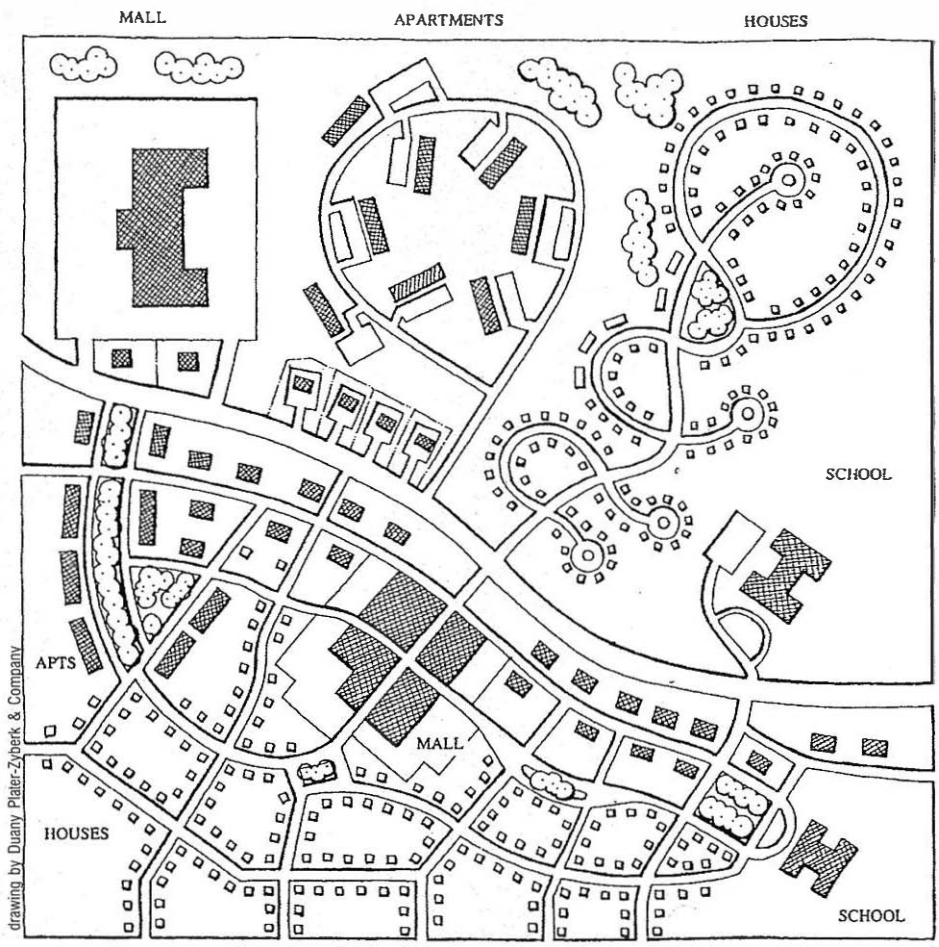


4.2

Strategy: Transit, Bike, and Pedestrian Connectivity

Smart development encourages people to take alternative modes—riding transit, biking, or walking—and has multiple safe routes to get to many destinations. In neighborhoods that adhere to the smart development model, a person can leave the car at home and take a short walk to the bank machine, ride the bus to a community shopping center, or pedal a bike to a nearby park. Interconnected streets shrink distances between points and make destinations easily accessible by any method of travel. People still have the opportunity to drive when traveling longer distances, but better connections make the choice of an alternative mode for shorter trips much more appealing.

Obstacle: Physical Barriers, Out-of-Direction Travel



Top: Conventional development with poor connectivity. Travel requires use of the collector street, causing congestion and discouraging pedestrians and cyclists.

Bottom: Smart development with interconnected street system. Design allows variety of transportation options and shorter trips.

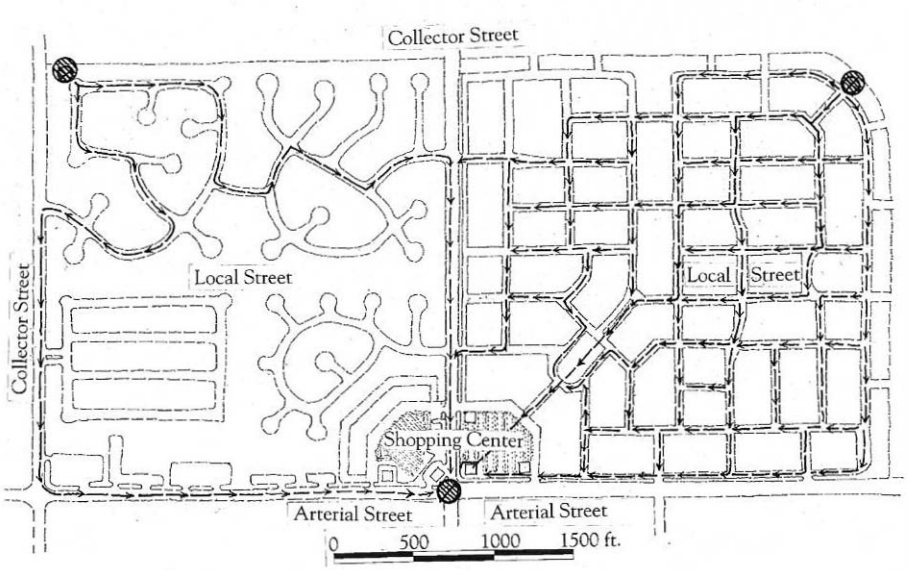
Poor connectivity often forces people to drive, restricting the viability of other methods. Many conventional street patterns are designed as a series of unconnected streets, funneling all traffic in a single direction and creating only one option for travel. Cul-de-sacs and other dead end streets stretch distances for all travelers, but are particularly difficult for those who do not drive. In some commercial areas, connections between adjacent buildings can be so poor that patrons return to their cars, drive back out to the arterial road, travel a few hundred feet to the adjacent parking lot, and park again to reach the neighboring building. In residential areas, children are unable to walk to school, not because the distance is too great, but because there is only one available route and it requires walking on a busy, dangerous, traffic-clogged street.

Solution: Internal Connectivity Standards, Cul-de-Sac and Block Length Maximums, Sidewalk Requirements

(code examples: Eugene, Oregon, appendix p. 42-45; Fort Collins, Colorado, appendix p. 46-47)

Cul-de-sacs and other dead end streets hinder connectivity and should be avoided wherever possible. Even when they are allowed, planners should attempt to make continuous, non-vehicular connections between streets. Building codes should be revised to mandate connectivity within neighborhoods, to build streets that provide continuous and generally more comprehensible routes to more destinations.

To quantify the connectivity of an area's streets, planners are beginning to use a standard ratio: street links divided by street link ends. The more links that exist relative to dead-ends, the more connectivity. This number is useful for comparing levels of connectivity between neighborhoods in different areas, and can be the basis for setting standards for new development.



Left: *Conventional development with limited and circuitous route options that require travel on busy collector streets.*
Right: *Smart development with many options for pedestrians, bicyclists, and motorists.*

Shorter blocks also encourage pedestrian activity by shrinking the perceived distances between destinations and enabling people to cut through to get where they are going. A reasonable average block perimeter is 1300 to 1800 feet, a distance scaled to pedestrians. Finally, and obviously, requiring sidewalks on all potential pedestrian routes will make walking safer and more convenient.

4.3

Strategy: Transit-Supportive Development

Transit-supportive or transit-oriented development supports a number of smart development principles, including providing people with more transportation options. Common sense and travel studies show that people who live closer to transit will be more likely to use it, so development built adjacent to or very near a bus or rail stop will help boost transit ridership and reduce the need for automobile travel. Since residential demand for parking is lower in areas close to transit centers, developers can seize the opportunity presented by land savings and public infrastructure investment to build at higher densities. Living close to transit also gives greater choices to those who drive, and offers an ideal environment for those who do not.

Obstacle: Proximity to Transit Lines not Recognized in Zoning and Development Codes

The public investment of a transit line creates opportunities for new kinds of development. Yet if zoning regulations do not recognize this potential, underbuilding can occur and fewer people have access to transit. Sparsely populated residential and commercial areas near transit stations squanders a valuable public resource and investment, and makes transit attractive to fewer people.

Solution: Mandate Transit-Oriented Development Along Transit Corridors

(code example: Eugene, Oregon, appendix p. 48-51)

Transit use mitigates a major negative impact of growth: increased traffic.

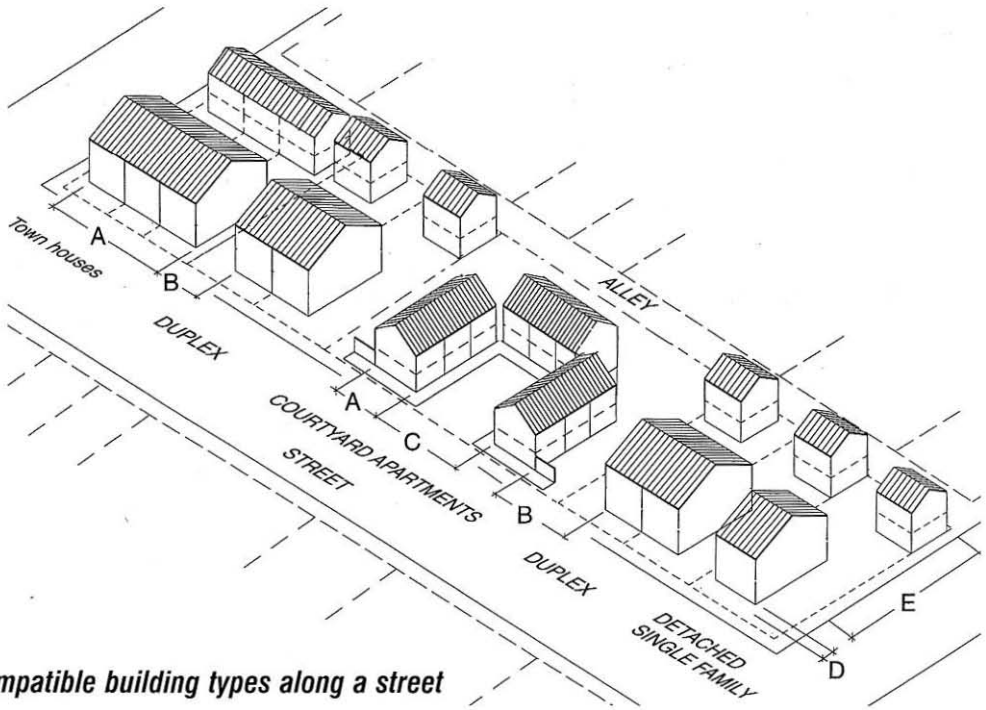
Some Oregon cities have established transit "overlay zones" where densities are required to be higher within a quarter mile walk from a fixed-route transit stop. This allows more intense development to occur along transit lines. Transit-oriented development is an ideal, low-impact solution for accommodating population growth since transit helps mitigate the major negative effects of more people: increased traffic. To be sure that the considerable expense of maintaining a transit line is not wasted on sparse, unsupportive land-use policies, higher density development should be required in overlay zones.

5. Detailed, Human-Scaled Design

5.1

Strategy: Compatibly Designed Buildings

A great deal of opposition to new construction and infill development comes not from the presence of more people, but with residents' justified concern about compatible design. If development to most people means cheaply built, inappropriate, or disharmonious buildings in their neighborhood, they will naturally resist any new construction. Smart development promotes new buildings that add variety while fitting with the existing neighborhood in their appearance, whether height, roof pitch, or building materials.



Principles of compatible building types along a street

The following rules make it possible for a limited range of building types to be built on the same street. The basis for compatibility is similar building massing along the street front, not exceeding the width and height of a large house. Positioning car storage well behind the front of the building (20 feet) is critical to the success of such a street. With multi-family buildings, alleys reduce the visual impact of cars by storing them to the rear.

A - 60 foot maximum continuous building frontage.
B - 15 foot minimum aggregate side yard.
C - 25 foot minimum courtyard break in contiguous project.
D - 10 foot maximum variation in setback. For infill projects, the setback is the average setback of buildings within 300'.
E - Parking is limited to the rear of the lot when alleys are not feasible (minimum 20 feet behind the building front).

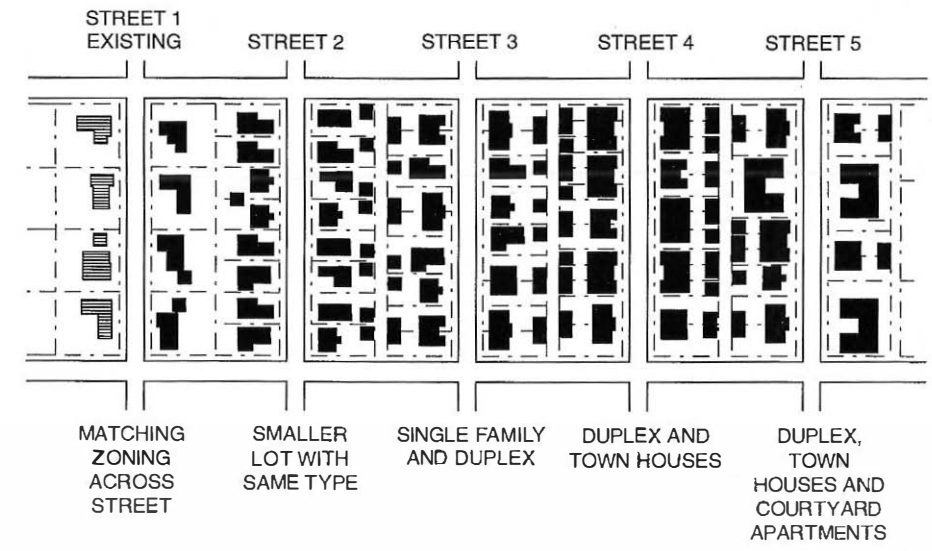
Obstacle: Too Abrupt Transitions Between Zones

The worst examples of incompatible building styles are frequently found on the border of zoning boundaries. On one side of the boundary is a detached, single family home, and on the other side is an eight-story apartment building—both acceptable within their zoning requirements, but uncomfortable neighbors. The cause of such abrupt changes is the recognition of the difference between zones as a line, rather than a transitional area. As long as the code has a particular set of requirement for one side of the street or zoning district boundary, and a different set of requirements for the other, the trend will continue.

Solution: Density Transitioning, Mid-block Zoning District Lines, Building Height Limitations

(code example: Portland, Oregon, appendix p. 52-54; Eugene, Oregon, appendix p. 55)

A way to moderate the jarring effect of a zone change is to allow a transition from one to another, to encourage a mix of building types within one block on either side of the boundary. This will allow the densities and building heights to gradually work up to the new level, without it happening all at once. Drawing the boundary mid-block, along the rear lot line of buildings, is another method to mitigate the effect of a new building type. Finally, placing a limit on building heights prevents developers from building towers adjacent to bungalows.



Adding New, Denser Housing Next to an Existing Large Lot Single Family Area.

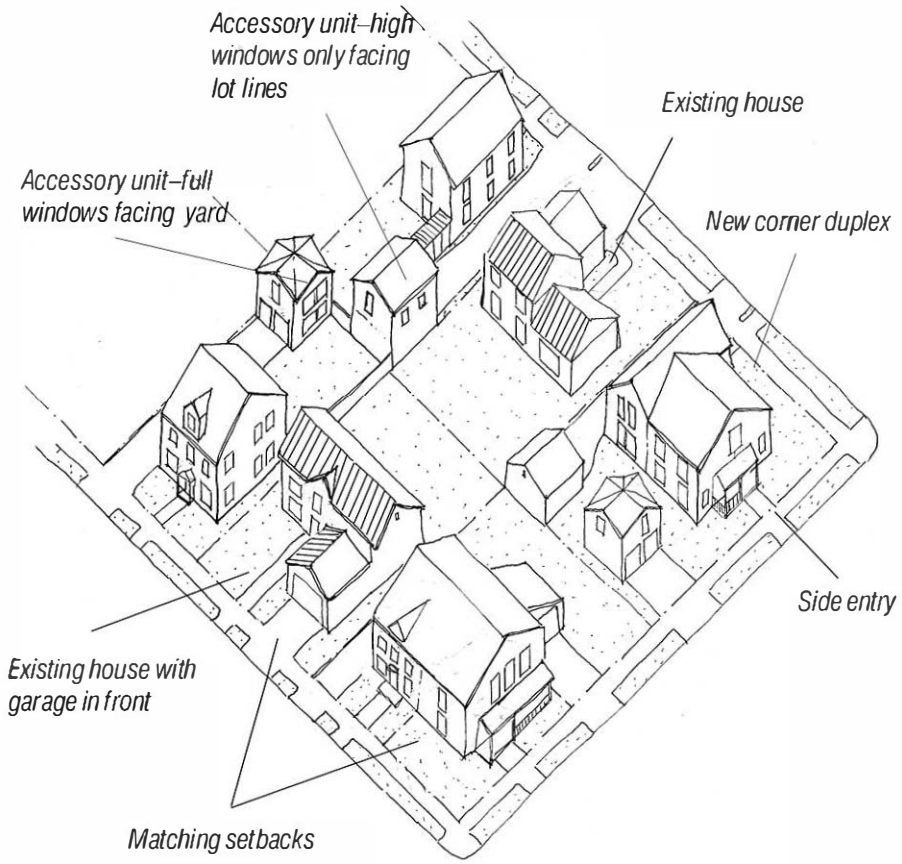
Similar building types allow denser development. New housing on Street 1 has lot sizes within 10 percent of the existing single-family lots across the street. It also has the same front and side setbacks and the same heights. Garages are still accessible from the front but are now set behind the new houses. On Street 2, the lots are smaller but the type is still detached single family. On Street 3 duplexes are added, and on Streets 4 and 5 town houses and apartments are introduced. All the types place parking to the rear of the lot, thereby allowing architectural elements such as doors, windows and porches to establish street harmony.

Strategy: Compatibly Designed Buildings

See the benefits of compatibility discussed in Strategy 5.1.

Obstacle: No Design Guidelines for New Buildings

Conventional building types, not accustomed to mixing with one another, typically have a poor level of compatibility within neighborhoods. For the past several decades, different housing types and uses were separate from one another and needed not fit in with any other buildings. Builders and architects lost touch with the concept of compatible design, one they had used for centuries. In the absence of an outward-looking view of neighborhood harmony, buildings became inwardly focused with little relationship to the other structures in the area. When placed in older neighborhoods, these introspective houses look exceptionally awkward, out of place, even disrespectful of adjacent buildings. Often, though, they are cheaper and easier to build, so without guidance they continue to sprout up in areas in which they do not fit visually.



Basic design standards help new, denser development fit in with existing neighborhoods.

Solution: Incorporate Compatibility Guidelines

(code example: Fort Collins, Colorado, appendix p. 56-64)

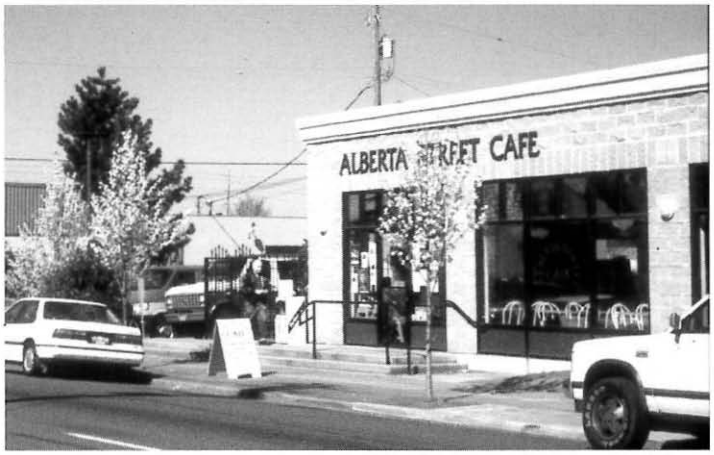
New and old buildings can be compatible and residential and commercial development can share the same space area. To assure the public that these can peacefully coexist, compatibility provisions should be written into the code. Guidelines should be spelled out for roof pitches, window heights, materials, and spacing. Street frontage character is particularly important for smart development and encourages similar heights and widths of buildings, car storage behind the building fronts, main entries, windows and porches oriented to the street, and similar setbacks. Of these guidelines, rear parking storage and a similar building massing are important enough that they might be codified as requirements. Overall, establishing basic

standards for compatibility reduces resistance to new building types and uses in an existing neighborhood.

5.3

Strategy: Pedestrian-Friendly Streetscapes (Commercial Districts)

Before the era of the large, auto-oriented shopping center, commercial development historically oriented its buildings flush with the pedestrian walkway, giving merchants maximum visibility to passersby. Making commercial activity friendly to pedestrians has been an extraordinarily successful merchandising model throughout history— first with open markets, then main streets, and now the pattern is mimicked in the interior design of shopping malls.



On busier streets where on street parking is scarce, 50 percent of the lot frontage is required to be built at a zero front setback. Visible lots to the side—not the front— of the building help attract passing traffic.

Bringing the scale of commercial street design back to pedestrians encourages people to walk, and attracts people to these areas. At the same time, a healthy, pedestrian-oriented streetscape can improve business for the merchants in the commercial district.

Obstacle: Street Standards Overemphasize Autos, Designs Discourage Walking

Once retailers began catering almost exclusively to their customers who arrived by automobile, the model for commercial development changed. Buildings were set far back from the street, separated by vast parking lots directly in front of the building. To gain the shopper's attention for these new kind of stores, window displays were replaced with enormous signs meant to be visible by swiftly passing cars. Drive-through businesses and acres of free parking made it even easier and more practical to reach commercial activity by car.

The quick rise of automobile-oriented commercial development was disastrous for the pedestrian. Vast spaces between buildings, poor pathways to and from destinations, no sidewalks, speeding traffic, and a loss of aesthetic interest discouraged all but the most determined walkers from arriving on foot. Eager to copy the successful suburban shopping center model, main street districts began to permit the construction of buildings and streets that encouraged car use at pedestrian expense. On-street parking disappeared, parking lots proliferated, buildings retreated from their sidewalks, and main entrances turned away from the street.

Solutions: Building Orientation, Location of Parking Lots, Shared Access Driveways, 80-Percent Frontage Rule for Main Street Commercial, 50 Percent for Commercial Streets, Coordinated Lighting, Signs, and Utilities, Street Trees, Limit Location of Drive Through Lanes

(code examples: Portland, Oregon, appendix p. 65-66; p. 73-75)

Smart development codes help make commercial streets attractive, convenient, and safe for pedestrians, cyclists, and motorists alike, while accommodating the parking and loading requirements necessary for commercial viability. Commercial buildings that support smart development principles should provide an interesting and safe environment for pedestrians, encouraging walk-in business and connecting with the surrounding community. There is a need for codes that allow for the pedestrian-friendly commercial street model as well as the front-parking lot, strip mall model.

The corner store, the main street, and the commercial street are three basic types of commercial areas crucial to smart development. For maximum pedestrian friendliness, in all three models buildings should have little or no setback from the street; parking lots should be located behind the building if possible and to its side if not; lighting and signs should be at a scale appropriate to pedestrians and not cars; continuous, connecting sidewalks with street trees, furniture, and pedestrian-scaled lighting should be required; and curb cuts should be kept to a minimum by requiring shared access.

A corner store with on-street parking in front.

Main street shops present a continuous storefront along the street with windows and doors that face the sidewalk. Main streets are at the edge of residential neighborhoods and have on-street parking with additional small parking lots behind the buildings. For a successful, interesting pedestrian environment, at least 80 percent of the street frontage must be buildings, yet there should also be a prohibition against long stretches of blank walls that face the street. Where practical, codes should be modified in main street districts to allow for certain commercial uses of the sidewalk, such as sidewalk sales or small cafe tables. There is an inseparable link between the orientation of the main shop door toward the street and on-street parking in front of the building. Without some kind of parking in front of the store, the possibility for a store's success is marginal. Main street standards should not be required, then, if on-street parking is prohibited.

Commercial streets also are located at the edges of residential neighborhoods, but are larger in scale and face major streets that lack on-street parking. For these buildings, the rear of the lot holds the bulk of the parking and side lots fill in the rest, while parking is forbidden between the store and the street. A minimum of 50 percent of the street frontage should be buildings, again, with restrictions prohibiting long stretches of blank walls. Main entries to buildings must face the street, or at least at the corner closest to a side parking lot.

5.4

Strategy: Pedestrian-Friendly Streetscapes (Residential)

Residents in smartly developed neighborhoods feel comfortable and safe walking. Whether just out for a stroll or on the way to a particular destination, residents can walk around their community and enjoy an attractive, interesting environment that welcomes them. Walkers bring more safety, more opportunities for communication among neighbors, and easy opportunities for recreation.

Blank walls create an unfriendly pedestrian environment

Obstacle: Street Standards Overemphasize Autos, Design Discourages Walking

In their zeal to accommodate the automobile, newer housing developments frequently ignore the needs of the pedestrian. Large, blank, unfriendly garage doors face the street, houses sit so far back from the street that they are hardly visible, and sidewalks are altogether missing. The pedestrian environment in many areas is so uninviting, uninteresting, or unsafe that walkers are regarded as suspicious or abnormal.

Solution: Require Sidewalks, Limit Setbacks, Place Garages at Rear, Allow Porch or Bay Window Encroachment, Coordinate Lighting and Utility Placement

(code example: Portland, Oregon, appendix p. 67-68)

Certain code changes can make residential zones more amenable to pedestrians, and more pleasant for all users. With few exceptions, continuous sidewalks should be required. Maximum front yard setbacks bring houses closer to the street, creating a comforting feeling of enclosure for the pedestrian and providing visual interest. Requiring garages to be set back further than the house prevents an unbroken line of blank garage doors facing the street, and discourages "two-car garage with house" style architecture. Allowing porches or bay

windows to encroach slightly into the front setback makes the area more visually interesting for pedestrians. Coordinated lighting and utilities also make a more pleasing and inviting streetscape.

5.5

Strategy: Quality Architectural Design

The attraction of older neighborhoods, and the reason so many people want to live in some of them, is the quality of the architecture. A building crafted and designed to attract interest benefits not just its owner, but the whole neighborhood. Visually interesting buildings add to the quality and permanence of an area, giving it a strong local identity and foundation as a community.

Smart development streets provide attractive, lively places to meet.

Obstacle: No Incentive to Provide Amenities

Codes often are written to provide a baseline, to set out the absolute minimum a builder must do to comply with the law. Since they are written as restrictions—things builders cannot do—regulations do not encourage the construction of buildings that have true quality and character, and often any attempt to do so makes the application or design process more complicated. Since it is invariably less expensive and less time-consuming to build lower quality, bland buildings, developers will choose that route—the path of least regulatory resistance.

Solution: Density Bonuses for Amenities

A smart development could establish a clear list of amenities—porches, bay windows, roof gables, etc.—and reward developers who incorporate those elements by allowing them to build at higher densities. In effect, the density bonus compensates developers for building more attractive and sometimes more costly housing by permitting them to extract more value from a property. Such a system creates higher quality buildings for the public to enjoy, and generates a higher rate of return for the developer.

Development Review Process

When reviewing development codes, governments should look beyond particular changes and pay careful attention to the overall process. Removing code obstacles to smart development projects, as in the previously mentioned examples, will eliminate the need for variances to accommodate them, saving time for both planners and developers. Integrating smart development principles into the code creates opportunities for builders to move forward with innovative projects if they wish, without engaging them in a lengthy development review process. Nevertheless, a code can still discourage smart development if approval for such projects requires months of waiting and mountains of paperwork. In brief, smart development projects should not be penalized for innovation with delays and uncertain outcomes.

Process changes that encourage smart development should be directed specifically at smart development projects. That is, projects that meet certain criteria or performance standards based on the five principles would automatically clear the process hurdles that would otherwise slow it down.

Because of the nature of many smart development projects, they may deviate from the traditional approval process and be subject to complications or delays. The most common, process-related problems faced by smart development projects today are: too many requirements for variances or conditional use permits, lengthy or complicated planned unit development ordinances, and overly discretionary design review processes.

Process Obstacle: Onerous Procedures for Variances, Conditional Uses

As discussed earlier, smart development projects are often infill projects, buildings on irregularly shaped parcels that may have environmental resources or other constraints that have caused developers to pass over the land in the past. Regulatory expectations for a standard, homogeneous development pattern may clash with the physical characteristics (i.e., slope, wetlands, riparian areas) of a particular parcel of land. Nevertheless, since most codes currently establish exact dimensions for lot width, depth and size, and most zones also have maximum density and minimum lot area requirements, smart development projects must apply for variances in order to build on such parcels. Strictly applying these requirements to infill often results in less buildable land than if developers had the flexibility to cluster development or average dimension requirements within overall density maximums.

The goal of removing code obstacles is to reduce the need for variances to accommodate smart development projects. However, this may not be possible in all cases. Because of their unusual shape or size, infill lots often call for different building plans than neighboring houses. To make the project fit the available space, a site planner may need to design the building in such a way that it varies from the applicable zoning code. For example, in order to give the front porch adequate depth without taking away from the square footage of the house, a designer might ask that the steps encroach three feet into a 20-foot front setback. Unfortunately, the only way to get permission for even the most minor changes in some development codes may be to enter into a long, complicated, and expensive variance process. The prospect of months of delays and additional paperwork thus discourages developers from pursuing smaller scale projects.

Solution: Allow Administrative Approval for Minor Adjustments

While a variance is appropriate for significant changes from the law, minor changes could bypass this process.

While a variance, and the process for acquiring one, is appropriate when a plan calls for significant changes from the existing laws, minor changes could bypass this process, or at least the requirement for a public hearing. A planning director could be empowered to approve adjustments in the code within a defined range, for instance, adjustments may not exceed a 20 percent difference. A jurisdiction may also want to cap the number of administrative adjustments without a public hearing, for instance, no more than three adjustments per project.

This kind of code flexibility could have helped the developer of a proposed single-family residential infill project in southeast Portland. Initially, the developer wanted to build four units of housing on a 19,200-square-foot parcel of land. However, the zoning code for the area called for minimum lot sizes of 5,000 square feet per unit, leaving him four percent shy of the land area requirement for a four-lot partition. Despite the fact that the parcel had street frontage on two sides, the developer was forced to divide the land into only three lots. These three lots are now 28 percent larger than originally planned, and both the city and the developer have lost the opportunity for an additional unit of housing. More flexibility in the code would have allowed this project—if it met all of the other code standards—to go through.

In another process change, Vancouver, Washington, has created a fast-track permitting process to encourage mixed-use development. Meeting certain requirements for mixed use entitles the project to an "Expedited Development Review Process," placing the applicant on a priority list.

Process Obstacle: Onerous Planned Unit Development (P.U.D.) Requirements

Again, many smart development projects involve the mixing of housing types and different commercial and residential uses that are not addressed or prohibited in development codes. As a result developers must either apply for variances or enter into a planned unit development process, both of which can be time-consuming and costly.

For larger infill projects, codes sometimes implicitly encourage development that makes inefficient use of land. Strict standards designed to protect the public from bad projects can also have the effect of discouraging good ones. New or innovative strategies for making the most of available land, such as changing the mix of building types or mixing uses, are sometimes expressly forbidden, unless a motivated developer has applied for a planned unit development.

Solution: Improved Planned Unit Development Ordinances

Allowing limited, small-scale commercial buildings in residential areas or multi-family buildings in certain commercial areas (see the earlier discussion of mixed use), eliminates the need for many planned unit development applications. For larger scale projects, specific code changes to the P.U.D. process can guide smart development and relieve some of the regulatory work for both developers and planning officials. For example, instead of simply mandating a minimum or maximum density for a development, a community could allow higher densities in exchange for specified amenities, such as a public park, pedestrian or bicycle facilities, design features, or a site for a school. Code language would need to clearly state the nature and extent of the amenities and the bonus earned for each.

Vague design standards invite uncertainty and controversy.

Process Obstacle: Discretionary Design Review Process

A great deal of community opposition to new development projects, smart or otherwise, is based on design issues. In response, many communities have instituted design standards, often with a design review hearing separate from land use approvals. While many communities have instituted design guidelines and a design review process to try to protect against bad designs, the design review process can be serve to bog down or delay projects. Vague design standards that can be broadly interpreted invite uncertainty and controversy. Again, this level of uncertainty may encourage developers to take the path of least resistance, leading to mediocre building and site designs that preserve the status quo.

Solution: Dual-Track Design Review Process

One approach to improving design review is to create a dual track process that allows the developer to choose from two options:

1. Adherence to prescribed and detailed specific design standards; or
2. A more flexible design review process based on performance guidelines.

This approach requires the community to create two sets of development standards. One set of prescriptive standards is defined in terms of distances, heights, density, and other precise and quantifiable standards that can be applied through an administrative process without public notice or hearings. The other set of performance guidelines outline community objectives, and are more flexible and likely to result in exciting and innovative design, but do require public notice and hearings.

The key is providing certainty and flexibility. The developer of a smaller, straightforward project can proceed with administrative review, provided the project meets specific standards. A more elaborate or complex project can go before a design review board to provide the design flexibility that some developers or architects prefer.

Removing Obstacles

Implementing Smart Development Changes

The initial step in any effort is to decide which of these smart development principles are appropriate for the community. A decision that these principles are worth encouraging should not be limited only to professional staff, but should represent a consensus of the key community stakeholders—planning commissioners, developers/builders, professional consultants, neighborhood and community activists, and elected officials. Local citizens must see these principles as a way to improve choice, convenience, compatibility, and connections in their neighborhoods. Although one or several local champions may provide leadership in promoting these principles, ultimately there should be a broader consensus that the principles add value to a community.

Once there is agreement that smart development is worth pursuing, the next step is to decide what to do and how to do it. This begins with evaluating existing plans, codes and standards to determine if the community's policies and implementation tools support smart development or include particular obstacles. At this stage, planners also should determine whether smart development changes can assist in implementing planning requirements, such as the Transportation Planning Rule.

This overall evaluation could stem from a comprehensive review process, such as is required during periodic review, or from the development of a specific plan element, such as a transportation systems plan or a housing policy study, that may focus on one or two smart development principles. Local citizens also can be the catalysts for prompting the consideration of smart development, or it could be a developer seeking more flexibility in building a project supported by the community and responsive to smart development principles. Finally, smart development changes could be initiated by a staff member, planning commissioner, or elected official who has read or heard about examples of how they have benefited other communities.

Regardless of how change begins, broad agreement is essential for long-term success.

Regardless of how change begins, broad agreement that smart development makes sense for the community is an essential element for long-term success. Having decided which principles to pursue, local officials can then move ahead to institute changes, either piecemeal or wholesale.

The assessment of the current code should clearly identify whether the obstacles to smart development are procedural, matters of substance, or simply ones of providing clarity as to intent. In some cases, changes may have to address all three areas, or the assessment may show that only one of these areas

needs to be addressed to remove obstacles. Furthermore, communities may choose to "experiment" with some of these ideas on an interim basis, retaining some degree of oversight to see how these principles work in practice. Based on their own experiences, and as builders, planners, and citizens reach a greater level of comfort and understanding, communities could then move to eliminate all obstacles.

Once a community decides it wants to consider smart development changes, a review process should be established. The key precept to be followed in designing such a process is that it be inclusive of as many interests as possible. This provides an opportunity to both inform and educate the public as well as obtain input and feedback.

The following approach might be used to conduct a review and establish smart development recommendations. It should be noted that this approach may not apply if the review was initiated by a developer who is proposing code changes to remove obstacles.

Step 1: Set Workplan, Identify and Involve Stakeholders

1. Develop a work program and schedule for the review.

2. Evaluate whether staff resources are adequate or if outside consulting assistance will be needed to supplement staff resources or toprovide a third-party perspective.

3. Identify key community stakeholders with an interest in removing obstacles. These should include local elected officials; the planning commission; representatives of the local development community, i.e., lenders, developers, builders and their planning or architectural consultants; representatives of neighborhood, community, civic, environmental or other organizations; the local press and others with an interest.

4. Conduct interviews/meetings with these stakeholders to inform them of the efforts, and to seek their input on obstacles, concerns, and opportunities that should be addressed. At this point, you may also want to provide a background briefing to the local reporter for the newspaper.

5. Set up an advisory committee made up of stakeholders to obtain review and feedback in subsequent steps of the process.

Step 2: Identify Code Obstacles, Outline Possible Solutions

1. Conduct a review of codes and procedures to identify obstacles to smart development, using this handbook as a guide.

2. Meet with the advisory committee to discuss obstacles and appropriate solutions.

3. Brief the planning commission on the obstacles and potential solutions and obtain their feedback. If possible, brief the elected officials on project status.

4. Prepare a draft set of proposals with clear explanations of alternatives. Be sure to describe why code changes would result in positive community benefits. Review the draft with the advisory committee and modify it, if necessary.

Step 3: Review Solutions, Adopt Changes

1. Provide an opportunity for public review and comment of the draft proposals through an open house, a display, and if appropriate, presentations to interested organizations. Brief the press on the effort to help publicize the open house.

2. Based on all the comments received, revise the draft recommendations. Review the new recommendations with the advisory committee and the planning commission. Depending on whether there is controversy surrounding the revised draft, you may decide to send the revised draft out to the original group of stakeholders to get their comments in writing.

3. Present the revised draft at a work session with local elected officials.

4. Prepare a final draft. Review it with the advisory committee and obtain their recommendations.

5. Present the final report with advisory committee recommendations at a public hearing of the planning commission. The planning commission recommends actions to the elected officials.

6. Final action is taken at a public hearing of the elected officials and changes are made to the code to reflect those actions.

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