

CRITERION 9(L) GUIDANCE 9/18/15

Disclaimer: The following provides technical assistance on Act 250 Criterion 9(L) (settlement patterns), 10 V.S.A. § 6086(a)(9)(L) (effective June 1, 2014). Examples used in this outreach material are for illustrative purposes.

Overview

Vermont's distinctive sense of place, quality of life and brand are tied to its historic development pattern of compact centers surrounded by working lands. Act 250 Criterion 9(L) encourages sound development that bolsters Vermont's economy because:

- It preserves Vermont's bucolic landscape, a cornerstone of why visitors from all over come and spend approximately \$2.5 billion dollars per year on lodging and services;
- It keeps our downtowns and villages strong and vital by encouraging new development in areas where it already exists;
- It saves tax payers money by making efficient use of existing infrastructure;
- It safeguards the millions of public and private investments in downtown and village revitalization;
- It helps get people out of their cars – walking, biking, and transit – which promotes public health and reduces transportation costs;
- It protects the environment, reduces vehicular greenhouse gas emissions, and supports longstanding policies including the Comprehensive Energy Plan and the state land use goals;
- It maintains the working lands that Vermonters and visitors cherish.

Criterion 9(L)

Settlement patterns. To promote Vermont's historic settlement pattern of compact village and urban centers separated by rural countryside, a permit will be granted for a development or subdivision outside an existing settlement when it is demonstrated by the applicant that, in addition to all other applicable criteria, the development or subdivision:

- (i) *will make efficient use of land, energy, roads, utilities, and other supporting infrastructure; and*
- (ii) *(I) will not contribute to a pattern of strip development along public highways; or*
(II) if the development or subdivision will be confined to an area that already constitutes strip development, will incorporate infill as defined in 24 V.S.A. § 2791 and is designed to reasonably minimize the characteristics listed in the definition of strip development under subdivision 6001(36) of this title.

10 VSA § 6086 (9)(L)

This document recommends a process to aid in the planning, design and review of a project in conformance with Criterion 9(L). The document is divided into 3 sections:

- 1) Existing Settlement Determination
- 2) Efficient Use Requirement
- 3) Strip Development Evaluation

Existing Settlement Determination

The first step is to determine whether the project is in an “existing settlement” as defined by statute. The burden of proof is on the applicant to establish that the project is in an existing settlement. Projects in an “existing settlement” are automatically deemed to comply with 9(L).

An existing settlement is either:

- *A state designated center. An area that is designated by the state pursuant to 24 V.S.A. chapter 76A as a Downtown Development District, Village Center, Growth Center, New Town Center, Vermont Neighborhood or Neighborhood Development Area. 24 VSA Ch. 76A. There are over 150 state designated centers in Vermont. [Click here](#) and enter the address of the development to determine if the project is located in a state designated center); or*
- *An existing center that is compact in form and size; that contains a mixture of uses that include a substantial residential component and that are within walking distance of each other; that has significantly higher densities than densities that occur outside the settlement; and that is typically served by municipal infrastructure such as water, wastewater, sidewalks, paths, transit and public parks or greens 10 VSA 6001(16). To qualify as an existing settlement that is not a state designated center, a center must include all of the following characteristics:*

1) It is an existing center that is compact in form and size.

Compactness as it relates to the built form of centers is a concept that has been present in urban planning and urban design literature for over half a century. The characteristics of a compact center include: relatively high density, mixed land uses, opportunities for social interaction, contiguous building patterns designed to encourage walking and cycling (Dempsey, 2010). An area that is compact should feel safe and comfortable for pedestrians. Compact centers should generally have roads with speed limits of 30 miles an hour or slower, as faster roads are more dangerous for pedestrians. Streets should have clear and consistent edges defined by multi-story buildings that are close to the street, have few gaps between them and are architecturally oriented to pedestrians by having front doors facing the street (USDOT, 2009; Campoli, 2012).

Figure 1 depicts the building footprints for existing centers that are compact in form, the small village of Townshend and Burlington, Vermont’s largest center. While vastly different in scale, both centers have consistent edges defined by multi-story buildings that are close to the street. There are some differences between the spacing of buildings in the small village and bigger city. In Townsend’s center, the buildings are on average 45 feet apart and the front doors of buildings on opposite sides of the street are between 65 and 90 feet away from each other. In Burlington, buildings are mostly 10 to 20 feet apart and front doors across the street from each other range from 40-100 feet apart. Existing centers that are compact in form would generally fall within these dimensional parameters.

Compact size is a highly relative concept. The Townsend example in Figure is approximately 30 acres in size and less than half a mile from end-to-end, while Burlington is over 2.5 miles across and nearly 2000 acres in size. Most centers in Vermont will be much closer to Townsend in terms of size. Burlington’s center is the largest in the state.

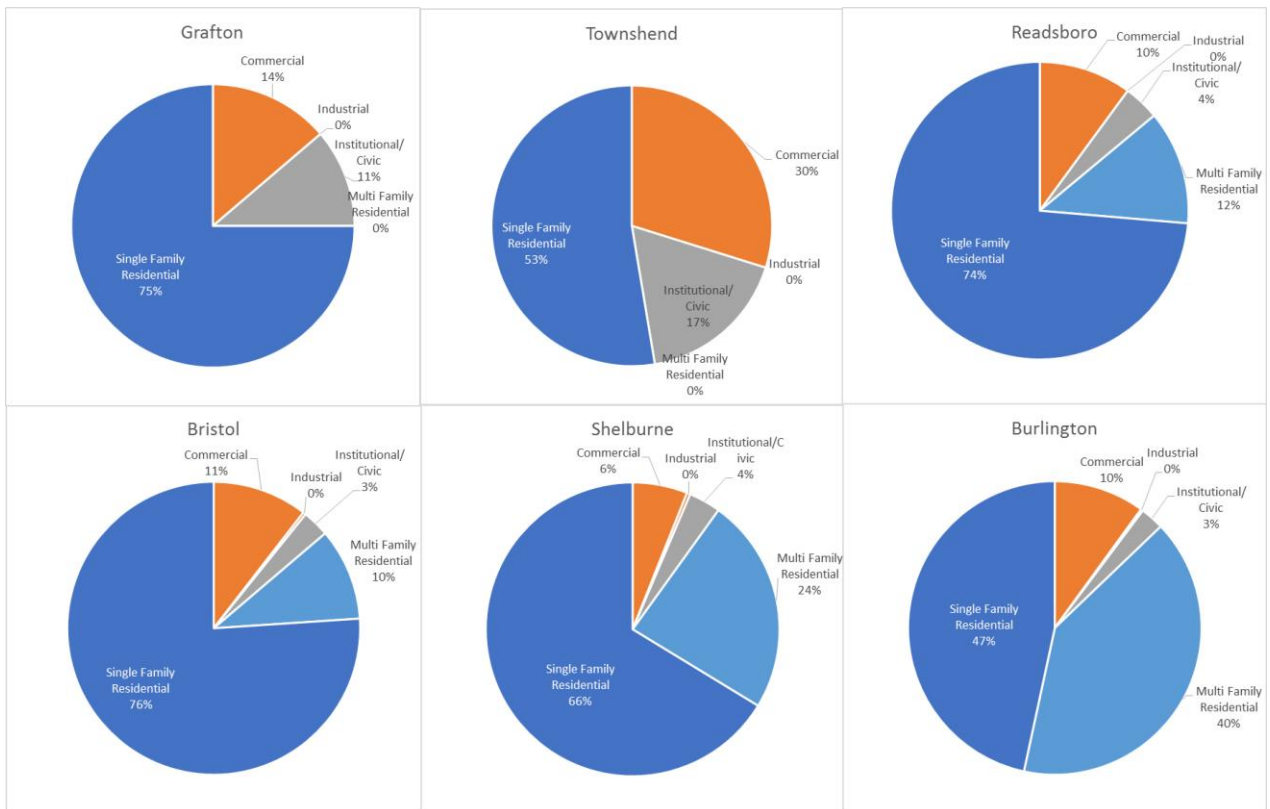
FIGURE 1: Compact form at different scales. The images below depict the building footprints within existing settlements of Townshend (left) and Burlington (right).



- 2) Contains a mixture of uses that include a substantial residential component and that are within walking distance of each other.

A center should have a core with a commercial and or civic component, as well as a substantial residential component. The examples below depict the ratio of uses for compact centers that differ in scale. Typically, more than half of the structures in Vermont's existing settlements will have a residential component.

FIGURE 2: Examples of mix of uses in existing settlements of different sizes. The pie charts in this figure depict the mix of uses based on E-911 data within approximate boundaries of existing settlements.



The planning profession has consistently defined walking distance to be between one quarter and one-half mile. The vast majority of compact centers in Vermont fit within a quarter mile radius of their commercial cores, while larger centers extend about a half mile from their commercial cores. One method of assessing whether or not there are a mix of uses with a substantial residential component within walking distance is to examine the ratio of uses within a quarter mile radius.

FIGURE 3: Mix of uses within a quarter mile of a project site. The image below depicts residential (green circles) and commercial addresses (orange triangles) within a quarter mile radius of a hypothetical project site. The project site is not in an existing settlement, as there is only one residential building within a quarter mile.

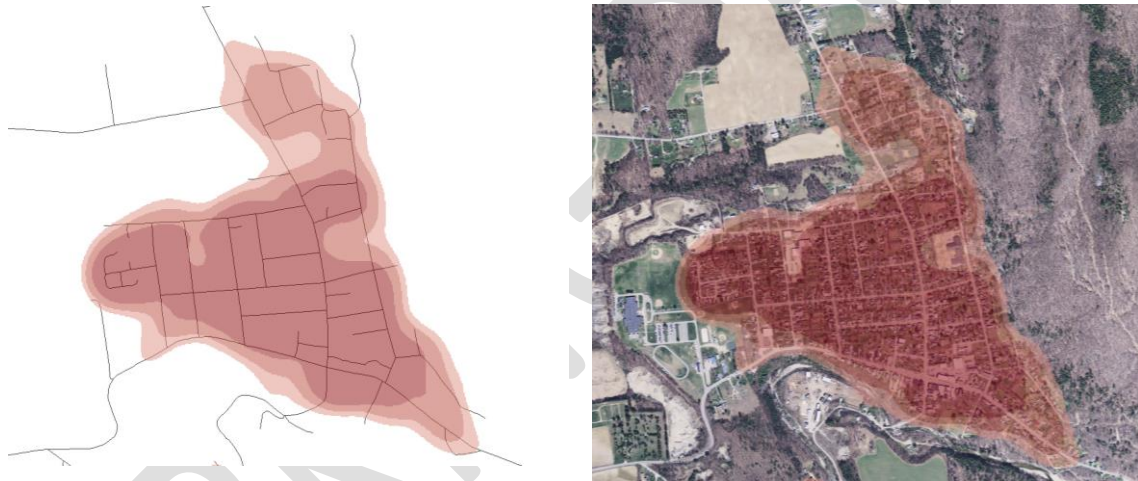


3) Has significantly higher densities than densities that occur outside the settlement

Density may be measured as the number of people, floor area or housing units per unit of area (Kolko 2011). Considering the different scales of settlements in Vermont, what qualifies as ‘higher density’ will vary considerably. The net neighborhood residential densities for the six communities in Figure 2 range from over 20 units an acre in areas of Burlington to close to 1 unit an acre in smaller villages.

One type of density that can be measured statewide with relative ease is E-911 point density. The ‘E-911 Site Density’ layer depicted on the [ANR Natural Resources Atlas](#) illustrates building densities throughout Vermont and can help assist in determining if the density of an area is significantly higher than surrounding areas. (Note: the layer was created using July 2015 EmergencyE911_ESITE data in ArcMap and included all habitable buildings in a kernel density analysis with an output cell size of 10 meters and search radius of 200 meters.)

FIGURE 4: Screen shot of the ‘E-911 Point Density’ layer on the ANR Natural Resources Atlas. The shaded area represents areas that have a higher densities of E-911 points. The image on the left depicts the density layer over the road network while the photo on the right includes an orthophoto of the same area.



4) Typically served by municipal infrastructure such as water, wastewater, sidewalks, paths, transit, parking areas, and public parks or greens.

Evaluate the area to see if this municipal infrastructure is present. While no single one is determinative, areas without at least some of this municipal infrastructure are unlikely to qualify as existing settlements.

Efficient Use Requirement

If a project is outside an existing settlement, 9(L) requires that it must make efficient use of land, roads, utilities and other infrastructure. Purely residential projects that meet the efficient use requirement comply with criterion 9(L). Commercial projects that meet the efficient use requirement must be reviewed under the ‘strip development evaluation’ outlined in the following section.

Projects that require that require the extension of utilities such as sewer, water, or power beyond areas already serviced may not be making efficient use of utilities and infrastructure. The burden of proof is on the applicant to establish that the project satisfies the efficient use requirement.

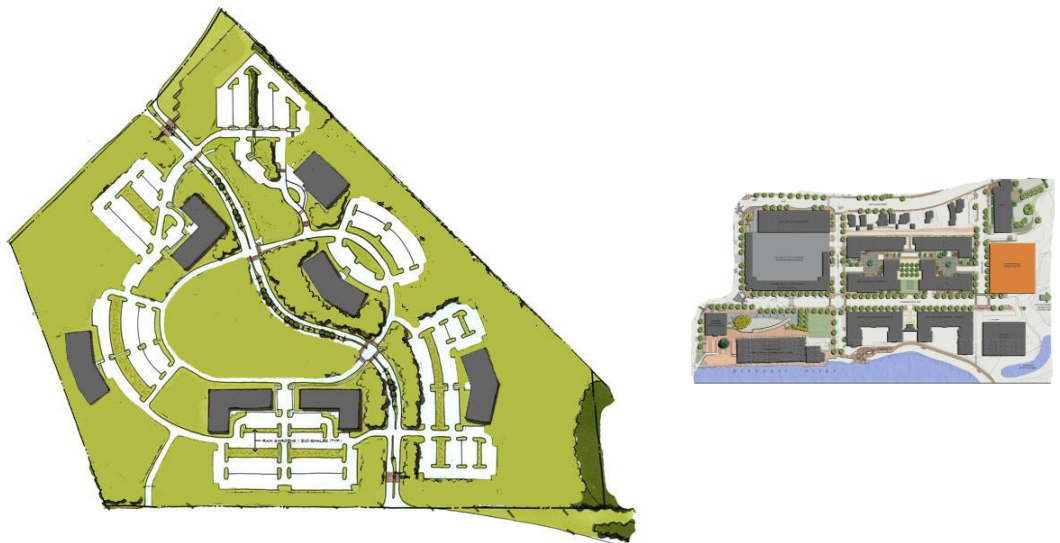
The example in Figure 5 juxtaposes two different development options for a tract of land, one of them making inefficient use of land, roads, utilities and infrastructure while the other makes efficient use of these resources. The project on the left includes 57,000 square feet of industrial/commercial single use, single story buildings, each with a dedicated parking lot, creating an inefficient layout, redundant paving and the unnecessary extension of sewer and water lines. By clustering new buildings at the edge of the meadow and sharing parking and circulation space and using multistory buildings, the project to the right provides for more square footage on a smaller footprint and requires less infrastructure. The project depicted on the right includes 61,000 square feet of light industrial/commercial space and 13-17 residential units.

FIGURE 5: Inefficient vs Efficient Use. The figure to the left depicts an inefficient site design typical of 1960's business parks and an alternative design (right) that makes efficient use of land, roads, utilities and infrastructure.



The example in Figure 6, below, depicts two different projects, one with 300,000 square feet of office space on 56 acres and the other an infill project on 18 acres with 300,000 square feet of commercial space and several hundred residential units.

FIGURE 6: Highly Inefficient vs. Very Efficient Use. The project on the left contains single use, single story buildings with no shared parking while the infill project on the right has just as much commercial space on 1/3 of the land, shared parking in a parking garage and also includes several hundred housing units.



If a project does not make efficient use of land, roads, utilities and other infrastructure, it does not comply with 9(L).

Strip Development Evaluation

If a project is not in an existing settlement, but does make efficient use of land, roads, utilities and other infrastructure, an applicant can demonstrate compliance with criterion 9(L) by either showing that the project:

- (I) *will not contribute to a pattern of strip development along public highways; or*
- (II) *if the development or subdivision will be confined to an area that already constitutes strip development, will incorporate infill as defined in 24 V.S.A. § 2791 and is designed to reasonably minimize the characteristics listed in the definition of strip development under subdivision 6001(36) of this title.*

These are two separate pathways for satisfying 9(L). If one pathway is satisfied, a District Commission is not required to make findings regarding the other pathway. The burden of proof is on the applicant to establish that at least one of the pathways is satisfied.

The definition of strip development, its characteristics and how to minimize them is explained in the final section of this document.

PATHWAY I: THE PROJECT WILL NOT CONTRIBUTE TO A PATTERN OF STRIP DEVELOPMENT.

In determining whether a project will contribute to a pattern of strip development, the first question to ask is whether or not the project includes the characteristics of strip development. Refer to the seven characteristics described on page 7 of this document to help determine what characteristics of strip development may be present.

The second question is whether or not there are circumstances that will make a project more or less likely to contribute to a pattern of strip development. Even if a project has some of the characteristics of strip development, it can be designed so that it minimizes the characteristics of strip development so that the project does not contribute to a pattern of strip development. The following are factors which may result in a finding by a District Commission that a project will not contribute to a pattern of strip development:

- If the properties surrounding the project tract are conserved lands that are unable to be developed and the underlying zoning limits the commercial development of these properties;
- If the project is located within an approved industrial park. The definition of industrial park in statute is “an area of land permitted under this chapter that is planned, designed, and zoned as a location for one or more industrial buildings, that includes adequate access roads, utilities, water, sewer, and other services necessary for the uses of the industrial buildings, and includes no retail use except that which is incidental to an industrial use, and no office use except that which is incidental or secondary to an industrial use 10 VSA 6001(37).”;
- If the proposed project is being designed to have limited visibility from a public highway, does not use water or wastewater infrastructure and is found not to significantly generate traffic;
- If the proposed project is a home occupation; and
- If the proposed project is a use that traditionally fits into the rural landscape and traditional part of Vermont’s countryside, such as a roadside vegetable stand.

PATHWAY II: IF A PROJECT IS CONFINED TO AN AREA THAT ALREADY CONSTITUTES STRIP DEVELOPMENT, COMPLIANCE WITH 9(L) MAY BE DEMONSTRATED IF THE PROJECTS INCORPORATES INFILL AND IS DESIGNED TO REASONABLY MINIMIZE THE CHARACTERISTICS OF STRIP DEVELOPMENT.

A project is “confined to” existing strip development if it is surrounded by strip development on both sides of the project along the same side of the public highway, not merely near other strip development or in an area of scattered development or sprawl. Consistent with legislative intent, the “confined to” requirement ensures that this provision can apply only to sites fully within existing strip development, to guard against leapfrog development, rural sprawl, and any extension of existing strip.

If a project is confined to strip development the next question to ask is whether it incorporates infill. Infill is defined as “the use of vacant land or property within a built-up area for further construction or development” 24 V.S.A. § 2791. An area that is confined to existing strip development is considered to be built up, therefore further construction or development in an area confined to strip should be considered infill.

If a project is confined to existing strip development and constitutes infill, the next step is to consider whether or not the project minimizes the characteristics of strip development. Refer to the seven characteristics described in the next section of this document to help determine if the characteristics of strip development are being minimized.

Strip Development

As discussed above, for either ‘pathway I or II’ it is essential to know whether or not the project, in and of itself, exhibits the characteristics of strip development.

According to statute:

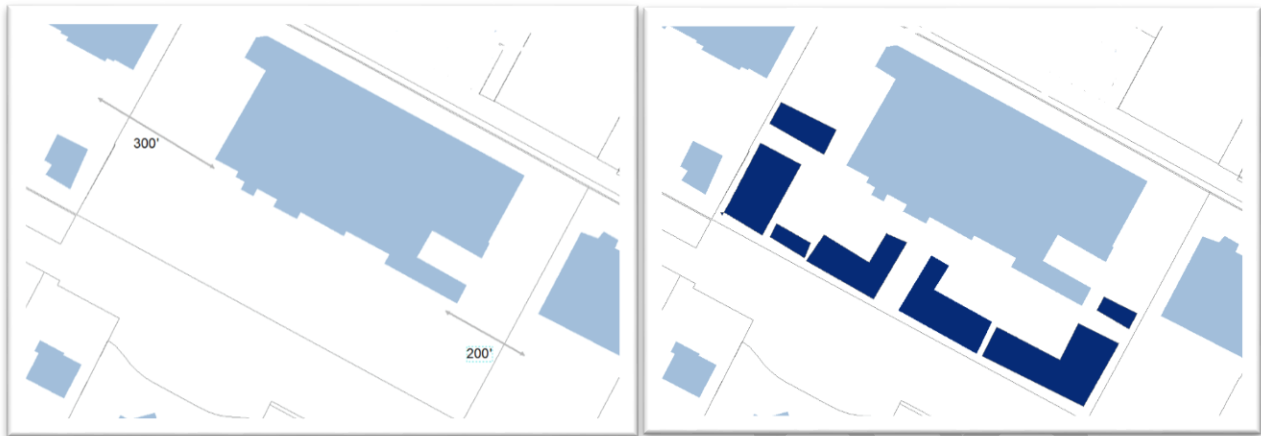
Strip development means linear commercial development along a public highway that includes three or more of the following characteristics: broad road frontage, predominance of single-story buildings, limited reliance on shared highway access, lack of connection to any existing settlement except by highway, lack of connection to surrounding land uses except by highway, lack of coordination with surrounding land uses, and limited accessibility for pedestrians. In determining whether a proposed development or subdivision constitutes strip development, the District Commission shall consider the topographic constraints in the area in which the development or subdivision is to be located.

10 VSA 6001(36)

The seven characteristics of strip development and examples of how to minimize them are listed below. Figure 11 at end of this document depicts a project that includes all seven characteristics of strip and figure 12 illustrates an example of a project that has minimized characteristics of strip development. A project is strip development for purposes of Act 250 if it includes three or more of the following characteristics.

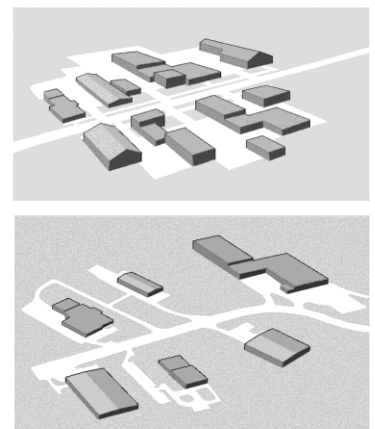
- 1) Broad road frontage. Buildings or parking lots that extend along the highway, lack depth and have large side setbacks exhibit broad road frontage. If the front door of a neighboring building is over 200 feet away it is a good indicator of broad road frontage. Adding new buildings in large parking areas and creating new streets and sidewalks that shorten block length is an approach to minimize this characteristic. Reorienting a building so that is perpendicular to a highway and has parking along the road frontage does not minimize this characteristic.

FIGURE 7: Infill minimizing broad road frontage. The existing building (left) is hundreds of feet away from neighboring structures. Adding new buildings that front on the street and create new streets (right) can minimize broad road frontage.



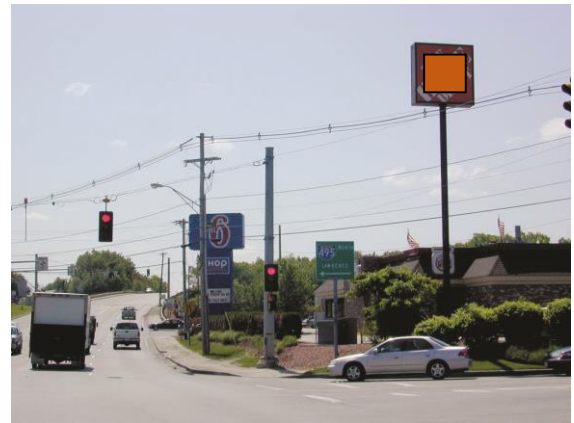
- 2) Predominance of single-story buildings. If a majority of structures in a project are single story, the project exhibits a predominance of single-story buildings. Note that second story façades simulating two stories should not count as multi-story. Construction of multi-story buildings or the addition of a second-story to existing buildings could minimize the predominance of single-story buildings.
- 3) Limited reliance on shared highway access. (i.e. exclusive access driveway). If the primary access to the project is directly onto the highway and if that access does not serve any surrounding development, the project exhibits limited reliance on shared highway access. Closing existing curb cuts, consolidating accesses or connecting access with surrounding properties are approaches to minimize this characteristic.
- 4) Lack of connection to any existing settlement except by highway. If there are no sidewalks or multi-use paths that connect a development to an existing settlement, the development displays this characteristic. Building a path or sidewalk connecting the project to an existing settlement would minimize this characteristic.
- 5) Lack of connection to surrounding land uses except by highway. There is a lack of connection to surrounding land uses if one must drive back onto a highway in order to access a neighboring property. Providing pedestrian and bicycle access to adjacent properties is one way to increase connectivity.

FIGURE 8: Shared highway access vs exclusive access drives.



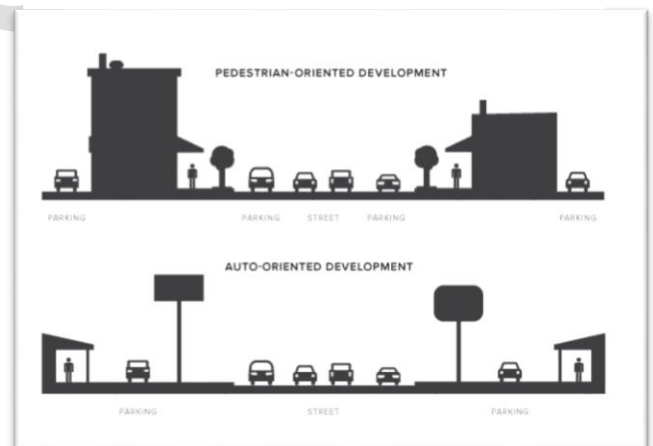
6) Lack of coordination with surrounding land uses. If the site layout of a property fails to consider its surroundings or doesn't anticipate future connections to surrounding properties – the project may lack coordination with surrounding land uses. This does not mean that uses and building sizes need all be the same or similar, diversity does not mean lack of coordination. Signage and lighting should complement the surrounding land uses and businesses should not use signage and lighting as a means of competing for attention. Site lighting and any building entries should be lit to a degree necessary for safety, rather than advertising. To avoid visual clutter the number, placement, height and size of business signs should be limited. Freestanding signs should be limited to one per lot, sign height should not exceed 16 feet and signs rarely need to be more than 25 square feet in size to be effective. Building or redeveloping a site in accordance with a master plan for an area and meeting a community vision articulated in a regional or municipal plan is one way to increase coordination and minimize this characteristic. A master plan should show how over time the area will develop, connect properties and minimize other strip characteristics.

FIGURE 9: Lack of coordination. Over size sign competing for attention and dwarfing surrounding buildings



7) Limited accessibility for pedestrians. If there aren't any pedestrian walkways separated from vehicular traffic that connect the sidewalk on the highway with the front door(s) of the development, the project has limited accessibility for pedestrians. Minimizing this characteristic could include siting a building next to the street and with a front door facing the street and placing parking on the side or the rear of the building. Walkways should connect pedestrians to transit stops, street crossings, buildings and store entry points, and central features and community spaces on or adjoining the site.

FIGURE 10: Buildings that are oriented to the street/sidewalks are more accessible to pedestrians than those requiring people to walk through parking areas.



Note: Topographic constraints should be considered when evaluating whether or not a project is strip development, as the topography may make it impossible to avoid certain characteristics of strip development. An example of topographic constraint that may necessitate a characteristic of strip development is a steep ravine that prevents a connection to an adjacent property.

FIGURE 11: Retail store that exhibits all 7 characteristics of strip development



FIGURE 12: Example of infill project that minimizes some characteristics of strip development by adding three story building on street and by adding connected streets and sidewalks. (Julie Campoli analysis for application #1R0948)



REFERENCES

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