Section 3
FITTING THE PIECES TOGETHER

The envisioned Neighborhood, as the fundamental unit of planning, is a place where people can live, work, shop and play. Its buildings, streets and public and private areas relate well to one another by plan, not by happenstance. Most importantly, the Neighborhood Model is sized so that an average person can walk from its center to its fringe in roughly five minutes. This area typically translates into a radius of 1/4 mile or an area encompassing roughly 150 acres. Within the Neighborhood, densities are mixed, as are uses.

One design approach that may be employed in the Neighborhoods is “the transect.” The “transect” is a cross-section of a neighborhood that shows a continuum of uses. Using the transect, the most active areas are at the “Center,” dominated primarily by high-intensity uses but also containing some residential uses. Spreading out from the Center to the “General Area” and then to the “Fringe,” development is increasingly residential in use and dispersed in density. In this fashion, the neighborhood accommodates a range of development types and intensities.

There are design approaches other than the transect that can accommodate and incorporate the principles of the Neighborhood Model. Of most importance in designing neighborhoods is the pedestrian scale development with destinations approximately every 1/4 mile.

The Neighborhood Model draws from the design principles of two models being successfully implemented throughout the United States, Traditional Neighborhood Development (TND) and Transit-Oriented Development (TOD). It shares with these two development models:

- the core-to-edge continuum of uses (“transect”) as one approach to the desired urban land use model;
- emphasis on employment uses in close proximity to residential uses;
- interconnection of streets and ability to walk to other residential areas, commercial uses, and employment centers; and
- the importance of neighborhood amenities such as parks and civic areas.
TRADITIONAL NEIGHBORHOOD DEVELOPMENTS (TNDs)

The Traditional Neighborhood Development (TND) is characterized by street grids, a mixture of uses, sidewalks, and parks within a walkable distance. Called traditional because they draw from the design of towns before World War II, the TND is compactly designed, with a center, an edge and a general area that is predominantly residential. Buildings are close to the street, the streets have sidewalks, and housing designs include porches and other traditional elements. Downtown Charlottesville exemplifies the original model for TNDs.

TNDs are designed as an integral whole. They can be designed independent of transit plans, although transit, particularly bus service, can easily be accommodated in the neighborhood center.

A TND can be developed as a single large project on an independent, large site. Its features, however, can also be appropriate for smaller infill sites in built areas. Or, most relevant to Albemarle County’s Development Areas, TNDs can form the building blocks for a larger urban unit. In this case, the common “edge” of adjoining TNDs can form a fourth area known as the core. The core has the highest intensity and greatest flexibility of uses.
The Neighborhood Model seeks to take some of these characteristics to change the form of suburban development.

**What Neighborhood Model Shares with TND:**
- Interconnected streets
- Sidewalks
- Emphasis on public realm
- Narrow streets
- Parks central to design
- Houses close to the street
- Mixed uses and housing types

**How Neighborhood Model Differs:**
- Does not require grid of streets
- Does not set architectural design

**Advantages of TNDs:**
- Land use and transportation can be integrated
- Densities can match local market
- The neighborhood created is attractive and livable
- The desired density for the Development Areas can be accommodated
- The neighborhood has a sense of community
- TNDs can connect to adjoining sites and are good building blocks
- Significant public amenities are created, including attractive streetscapes and open spaces

**Disadvantages of TNDs:**
- Densities may be too low to overcome the overall pattern of sprawl.
- Sites large enough for a TND may be difficult to find in locations compatible with the Comprehensive Plan.
- Architectural design standards would be difficult to impose.
TRANSIT ORIENTED DEVELOPMENT NEIGHBORHOODS (TODs)

Similar to the TND, the TOD is characterized by Edges, General Areas, Centers, street grids, and sidewalks. Additionally, it makes transit the link between individual neighborhood centers. TODs are located and designed to maximize transit ridership. The location of transit is established first and new neighborhoods are planned around it. In each neighborhood, housing is mostly within a five-minute walk of the transit stop. The centers are fixed along transit routes.

Densities must be high enough to support the transit. TODs tend to be higher density than TNDs and to have a greater intensity of uses at the Center.

In Albemarle County, transit is provided by CTS and ridership outside of the City is low. Changes to bus schedules and sizes could possibly increase ridership, but it will likely be several years before the TOD model can be used effectively in the County. Nevertheless, the Master Plans for each Development Area can usefully look ahead to a TOD form.

What Neighborhood Model Shares with TOD:
• Same features as TND.
• Potentially high density at the Core.
• Incorporates mass transit opportunities into the Master Plan process.

How Neighborhood Model Differs:
• Does not dictate location, frequency, or types of mass transit stops.
Advantages of TODs:
- The TOD builds on the positive features of the TND.
- Transit and neighborhoods are planned simultaneously.
- Design works well for infill or retrofit where transit is contemplated.
- It allows for and encourages a density that removes reliance on the automobile.

Disadvantages of TODs
- Design based on transit goals may not meet current market forces.
- Developers and financiers may be reluctant to try unconventional design.

The Neighborhood Model adapts the TND and TOD concepts to the needs and conditions of Albemarle County. Unlike the TOD, the Neighborhood Model does not mandate minimum densities at centers, which, in Albemarle County, must be a function of environmental factors, market forces, and availability of infrastructure. The Neighborhood Model anticipates the availability of transit at the neighborhood center, although in the near term this would more likely be a van service, with bus or light rail in the long term. In contrast to the TND, the Neighborhood Model does not specify an architectural style. Another difference is that it incorporates a strategy for addressing the hilly terrain of Albemarle County.
THE TRANSECT CONCEPT

The Neighborhood Model, as well as the two previously described models, use a continuum of density and activity moving out from a core. The continuum of density and activity moving away from a “core” is called “the transect.” The transect is a “cross-section” of neighborhood. As the structure within which the development pieces may fit, it can be the beginning point for detailed planning and design decisions within each Neighborhood. The transect, however, is fundamentally a device to plan walkable neighborhoods. Its theoretically perfect geometry will be defined by the circumstances and needs of each Development Area. For example, existing roads, developments, and infrastructure must be factored into the planning of neighborhoods. Existing roads, developments, and infrastructure will have an impact on the ways in which mixed use and density are planned. Other approaches that set up positive relationships between uses with an urban form may be appropriate for the Development Areas. The transect can guide the Master Planning process as well as zoning decisions.

Figure (3.5) illustrates the Transect. This drawing shows how various development elements — such as density, use, building size, street design, lot dimensions and siting, and formality of landscaping — reflect whether the project is in the center, in the general area, or on the fringe of the Neighborhood.

The Transect, as defined in The Lexicon of the New Urbanism, prepared by D/P-Z, Inc., the foremost architectural firm associated with the New Urbanist movement, uses an urban-to-rural continuum to appropriately site the elements of community form. As a system of classification, the Transect has the potential to be a tool in the generation of a Master Plan.

Four categories are relevant within Albemarle County’s Development Areas:

1) Fringe (the D/P-Z, Inc. name is “Edge”),
2) General Area,
3) Center, and
4) Core.

--- A fifth category (Rural Area) lies beyond the Development Areas.

The Core, the area of greatest intensity, deserves special emphasis. A core represents even greater density and formal design than the Center. It can lie at the junction of two neighborhoods, or at major intersections, or be an existing hub. In the case of Albemarle County, the City of Charlottesville serves as a core for adjoining areas of the County. Core areas are not appropriate for Villages and may not even be appropriate in all Development Areas.

Fringes are formed where two neighborhoods abut, where a neighborhood abuts the City of Charlottesville at a river or slope, and where the Development Area meets the Rural Area. When the Fringe is not clearly defined, as with R-1 zoning, the end result is a sprawling development form. Fringes are further described in Section 6.

Centers are nodes of activity. They are further described throughout the document as well as in Section 6. The distance from the Center to the Fringe of the transect is about 1/4 mile. This distance represents the ideal walk time from one destination to another.

The Transect describes the neighborhood, the most important of the elements that make up a Development Area. Other components are the district and the corridor.

The diagrams on the following pages may be employed in different ways to meet the objectives of the County’s Land Use Plan and apply the principles of the Neighborhood Model.
The Neighborhood Model: Building Block for the Development Areas

Example of a Neighborhood within the Designated Development Area

Figure 3:5. Diagram of the Transect, Modified by permission from the Lexicon of the New Urbanism, Duany, Plater-Zyberk, Architects.
Neighborhood:
The neighborhood is the fundamental building block. Each Development Area is anticipated to contain several neighborhoods. The precise number of neighborhoods will vary between Development Areas depending on their size as well as physical conditions unique to each Development Area. Many neighborhoods will incorporate areas that are already developed. Within or adjacent to these developed areas, there may be vacant or under-used sites that can be redeveloped to enhance the neighborhood. In other places, neighborhoods will be designated in undeveloped, “greenfield” areas of the Development Areas. These new neighborhoods will offer the opportunity to use the Neighborhood Model as a foundation.

District:
The district is an area containing specialized uses, such as an airport or large-scale manufacturing facility, that cannot be accommodated appropriately in a Neighborhood. The district is the exception, not the rule in the Development Areas. Although sized and designed much like the Neighborhood, districts do not have the range of activities and housing that are offered in Neighborhoods. Although districts generally will focus on a particular use, there usually is a center area, providing a location for transit and for supporting business and retail uses. While primarily singular in use, districts can sometimes contain compatible uses at their Fringe or Center areas. It should be interconnected with adjacent neighborhoods. In some instances, however, a district may need to be located a sufficient distance from the neighborhoods in order to reduce impacts such as traffic burdens or competition with local retail cores.

Corridors:
Corridors are the linear elements that connect neighborhoods (and other sites such as districts) to each other. Where corridors exist between neighborhoods, the Neighborhood Model envisions that they be conceived as civic elements. Corridors can be man-made or natural and serve transportation requirements or exist as open space. Open space corridors combine natural features such as rivers and stream valleys with man-made elements such as parks and golf courses to provide a significant infrastructure of open space throughout the Development Area. Greenways can even link separate neighborhoods together through a series of hiking and biking trails. Transportation corridors include light rail lines, bus corridors, parkways, highways, and pedestrian and bicycle trails.

Section 4, Master Planning, discusses how a plan is developed to incorporate all of these elements into each Development Area. Section 5 illustrates the types of plans that could be developed through the Master Planning Process.