Introduction:

Traditional urbanism represents an outwardly simple, yet highly evolved system for human habitation that encompasses all of the necessary ingredients for daily living in a compact, efficient, and pleasing form. Of all the elements comprising traditional urbanism, which includes residential, civic, recreational, commercial and retail uses, retail has proven to be the most challenging to reintroduce into a traditional urban setting, when held to contemporary standards of suburban retail planning and market criteria.

The Transect, however, provides one means of effectively reintegrating retail uses into a traditional urban context by proportionally allocating land uses and transportation infrastructure, relative to density of population, in such a way that retail uses are accurately provided for in both scale and distribution, commensurate with, and proximate to, the demand for those goods and services.

This relationship, when properly realized, hierarchically balances consumer demand for retail goods, with the market's access to those goods (and vice-a-versa), resulting in a more effective use of natural resources and capital investments, providing a more convenient and efficient means of accommodating daily needs, while reducing our impact on, and degradation of, the natural environment.

The Retail Transect in a Regional Context:

The Smart Code describes regional demarcations in two fundamental ways: At the Sector, (Regional) level, by Tier, and at the Community level, by Context Zone (T-Zone). The Tier defines the larger regional context in which development may occur, while the T-Zone more specifically articulates the nature in which that development should happen.

To a certain extent, while the Tier designation (which is largely determined by regional factors such as existing or proposed infrastructure, current or anticipated residential and/or employment concentrations, the presence -- or lack thereof -- of sensitive environmental areas, etc.) outlines the larger contextual framework to which a development proposal must respond, it is the T-Zone that defines the specific types and scale of the uses that may take place within that development. For this reason, it is the T-Zones that most directly affect the generation of retail consumer demand, and should therefore also most directly determine the appropriate physical and market-derived response to that demand.

Defining the Retail Transect:

The most significant characteristic of retail in a regional *urban* context is that its scale grows incrementally, *and in a cumulative fashion*, relative to its associated placement within the Transect. In other words, as the Transect Zones increase in both density *and* complexity (from T-2 through T-6), traditional urban retail should correspondingly increase in both scale *and* diversity.

The specific nature of this cumulative accretion is generally dictated primarily through the transportation network hierarchy mentioned previously, whereby a full spectrum of street types and transportation modes, hierarchically deployed within a comprehensive

regional fabric, yields a full spectrum of retail typologies, serving everything from a neighborhood-oriented, pedestrian-based trade area, to a full regional-scaled retail consumer market. This arrangement is not only efficient and self-regulating -- by definition -- in terms of balancing location-specific retail demand and supply, it also encourages retail competition to take place primarily between retailers of similar size and resources, reducing or eliminating the challenges presented by over-scaled retail formats (big boxes), inappropriately situated (meaning – inconsistently with their transect classification) within the regional context.

Retail Typologies:

Fundamental retail center typologies are based upon recognized patterns of consumer spending, relative to tenant composition and frequency of need – which, taken collectively, define the sizes of their respective trade areas. These types, which have been codified by the Urban Land Institute to represent standardized models for the purposes of financial and market feasibility analysis, are also applicable to a traditional urban setting. The equivalent traditional retail classifications are as follows:

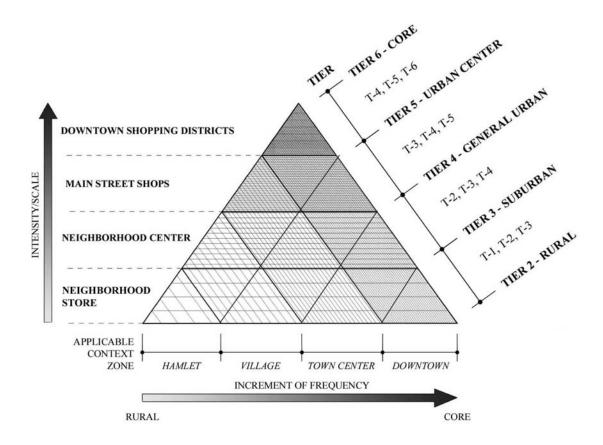
- 1. *Neighborhood Store* -- A retail business that provides a convenient location for quick purchases from a wide array of products (predominantly food). They are usually less than 5,000 square feet in size, with convenient access and parking, and with extended hours of operation.
- 2. *Main Street Shops* -- A collection of stores and commercial establishments providing for the sale of personal services (dry cleaning, barber shop, shoe repair) and convenience goods (food, drugs and sundries). Usually anchored by a small personal/convenience or drug store, and may include a local restaurant/café, it has a typical gross leasable area of up to around 20,000 square feet.
- 3. *Town Center Shops* A supermarket anchored, neighborhood-serving center providing for range of daily needs and personal services. Ideally sized around 50,000 square feet, it can typically range in area from between 30-80,000 sq. ft. and may include a junior department store and several food establishments at a variety of price points and service levels.
- 4. *Shopping District* A regional center providing for the sale of general merchandise (apparel, furniture, and home furnishings and accessories) in depth and variety, as well a range of services and recreational facilities, in addition to a wide array of dining and entertainment options. It is anchored by one or more full-line department stores of not than 75,000 square feet, with a total gross leasable area for the entire center of around 500,000 square feet, although it can range from 300,000 to 850,000 square feet.

In a conventional suburban market context, the trade areas of the above center types can vary significantly due to variations in population density and household incomes (and hence spending potential), but more typically -- vary primarily based upon a given retail center's ability to access the market through distortions in the existing transportation networks (i.e., locations on heavily traveled, over-scaled thoroughfares that provide access to a larger market than would otherwise be proximately available, resulting in disproportionably-scaled formats, relative to localized demand).

However, in a Transect-based Regional Plan, retail center types can be more closely aligned to the specific consumer patterns and spending potential of the community they're serving, resulting in more consistent economic performance and greater resiliency to changing market dynamics for the centers as a whole, and the individual retailers contained therein.

Location within the Transect:

The following Diagram illustrates the optimal relationship between retail center types and Transect-based community development models. In general, retail happens not at all in T-1, and in T-2, happens only sporadically, and is often related to the rural/agricultural nature of its Tier or regional context, such as country general merchandise/farm supply stores. From T-3 through T-6, however, retail tends to occur in a much more rational and consistently modulated basis – but again, increasing in scale and diversity primarily in response the ever-increasing density and complexity of the urban fabric around it.



In reading the diagram, one should also note that as retail grows cumulatively within the Transect (moving from T-2 to T-6), most of the retail typologies from the lower levels of the Transect will tend to reoccur, but at increasingly higher frequencies, in response to the changes in population density, as suggested above in the progression from Hamlet/T-2, through Downtown/T-6.. In other words -- the most fundamental level retail center category, the *Neighborhood Store*, might only occur at ½ mile intervals in T-3, but would also be present, albeit at much higher frequencies, such as on every corner, in T-5 or T-6.

This would again be as a result of the correspondingly higher population densities, and greater spending potential, available at those more intensive urban levels. Also, each preceding retail center increment will generally be embodied in the makeup of the subsequent one (that is to say, most of the components of a *Neighborhood Center* would be present in the tenant composition of the *Main Street Shops*, and so on).

To understanding how retail typologies mutate and evolve over time, as cities grow within this framework, read the diagram starting from the lower left hand corner and progressing toward the opposite (upper right-hand) side, with each increment representing a hamlet evolving over time first into a village, and then a town, and finally, a city. With each increased increment of urbanity, a corresponding elevation of the "climax" retail typology results (along with a whole additional layer of lower types), but at no time is the scale and fundamentally characteristics of that climax type inconsistent with the overall stage of evolution of the community.

Challenges to Transect-based Retail Integration:

Through its separation of uses, conventional suburban development effectively severed retail from the intrinsic relationship it traditionally shared with the community it served. This fundamental change, combined with a growing regional suburban reliance on significantly coarser arterial networks, comprised of wider spaced, but substantially larger and higher-speed, higher-capacity thoroughfares, have encouraged suburban retailers to respond in kind, with increasingly larger retail formats, spaced ever further apart.

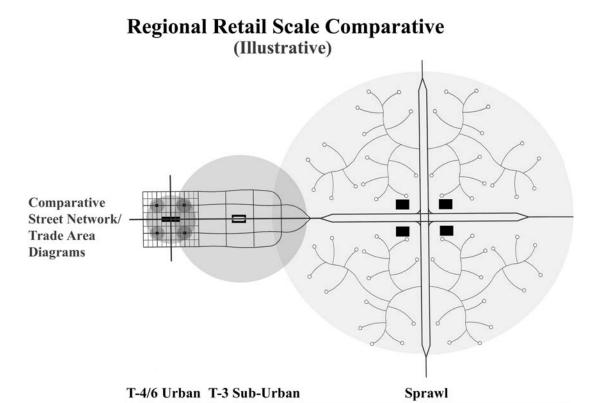
This physical disconnect between community and retailer, exacerbated by our overreliance on infrequently spaced, large-scale arterials created, in effect, a regional population of automobile borne, free ranging consumers -- easily aggregated at major intersections in sufficient quantities to sustain virtually any sized retail box imaginable. As a result, "standard" retail formats have increased steadily and dramatically in size and associated trade area for the past 50 years.

Unfortunately, this model affords no direct proportional relationship between the size of the retailer and its immediate context, bringing significant market distortions into play, and disrupting the ideal urban balance between consumer and provider, thereby marginalizing both the concept, as well as the viability, of neighborhood retail in the process. And, as the viability of neighborhood retail has been impacted, the inherent advantages of compact, mixed-use development, from an efficiency and sustainability perspective, have been likewise diminished.

The following diagram, based upon a typical contemporary metropolitan area (in this case, it was modeled upon Omaha, Nebraska), and depicting the evolution of the traditional urban street network/retail hierarchy over a period of time from pre-war urbanism, to pre-war sub-urbanism, to post-war sprawl, illustrates the change from urban to suburban retail models perfectly:

The street network evolves from a compact, walkable, mixed-use urban fabric in the first diagram (far left), to less dense residential neighborhoods (middle), but with a still visible articulated street network, to full-blown sprawl, with low density residential development, segregated uses, and a dendritic residential street configuration (far right), which forces all trips for daily needs out onto a single, large arterial network, around which is clustered a group of large box retail responding to the correspondingly high number of traffic counts.

Because the basic merchandise categories haven't changed, only the scale of the retail formats in response to the ability to capture a much larger number of residential units through the increased dependence on fewer, but much larger arterials, the actual sales per square foot of the individual stores, as well as the square footage allocation per household unit does not actually vary greatly across the three diagrams. However, the larger capture, combined with the much lower densities typical of sprawl, results in substantially larger trade areas, geographically speaking, resulting in proportionally, and substantially, more vehicle miles per trip, just to satisfy the same basic retail needs.



Square Footage/ Residential Unit	Same	Same	Same
Relative Scale	1.0	1.5	3.0 +
Average Distance To Daily Needs	1/2 mile	2 miles	3 - 5 miles or more

Conclusion:

The Sector Plan, when properly implemented, balances transportation infrastructure against regional demand, in a finely articulated fabric that acknowledges the detail-specific planning criteria of the community, from hamlet to regional center. And in so doing, when coupled with appropriate land use planning, provides an ideal framework for integrating a full complement of uses, including retail, in a healthy, equitable, and sustainable fashion. In other words, retail in a traditional urban context is, by nature, both <u>self-regulating and self-correcting</u> (this is an incredibly important point), thereby eliminating or avoiding many, if not most, of the problems associated with large-box retail today.

Application of the Smart Code at the regional, or Sector level, not only provides a clear framework in which new development can take place, it can also help rationalize existing development: Where retail concentrations exist out of proportion to its place within the Transect, remedial actions can be justifiably implemented, wherever possible, to put the retail back into more appropriate balance and scale, relative to its Transect context. This can be accomplished by either gradually reducing the amount of retail, or by adding additional density of other uses, or – ideally -- by a combination of both.