Retail and the Transect

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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, retail has proven the most difficult to implement in a traditional urban format, particularly when applied in a primarily suburban context, and when held to contemporary standards of suburban retail planning and market criteria.

The rural-to-urban Transect, however, provides an effective tool for reintroducing traditional retail formats into a regional context. It does so by proportionally allocating land uses and transportation infrastructure in such a way that the retail uses are appropriately distributed, in both scale and location, relative to the sources of demand for goods and services. This model is consistent with historical urban land-use practices, and generates a system that is optimized around locational efficiencies and is, in effect, self-regulating.

This approach, when properly realized, effectively balances the convenient availability of retail goods and services with the frequency and level of consumer demand. In other words, the products that are most frequently needed and consumed are those that are most widely available, at appropriate increments of scale and distribution relative to that demand, throughout the region. Conversely, products that are purchased in a more discretionary fashion and/or with considerably less frequency, are appropriately clustered where they will be accessible to the largest possible concentrations of consumers (typically in the urban core), because those merchants need to capture the maximum incremental demand from the largest pool of customers possible, in order to generate a sufficient customer base to sustain themselves.

Traditional retail types have fundamental characteristics which are consistent with contemporary conventional retail center types, in that they both evolved around recognized and historical patterns of consumer spending, based upon the size and composition of the merchandising mix, tailored to ensure the maximum theoretical capture of consumer potential within a given center's designated or assumed trade area. In general, smaller trade areas typically focus on a more limited palette of goods, purchased on a frequent basis close to work or home, while large trade areas by definition encompass and present a much broader spectrum of consumer products.

The conventional retail types, which have been formally 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 designations of the ULI classifications are described 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 personal services (dry cleaning, barber shop, shoe repair) and convenience goods (food, drugs and sundries). Usually anchored by a small 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 center providing for a range of daily needs and personal services to the surrounding neighborhoods. Ideally sized around 50,000 square feet, it can typically range in area from 30,000 to 80,000 square feet, and may include a junior department store and several food establishments at a variety of price points and service levels.

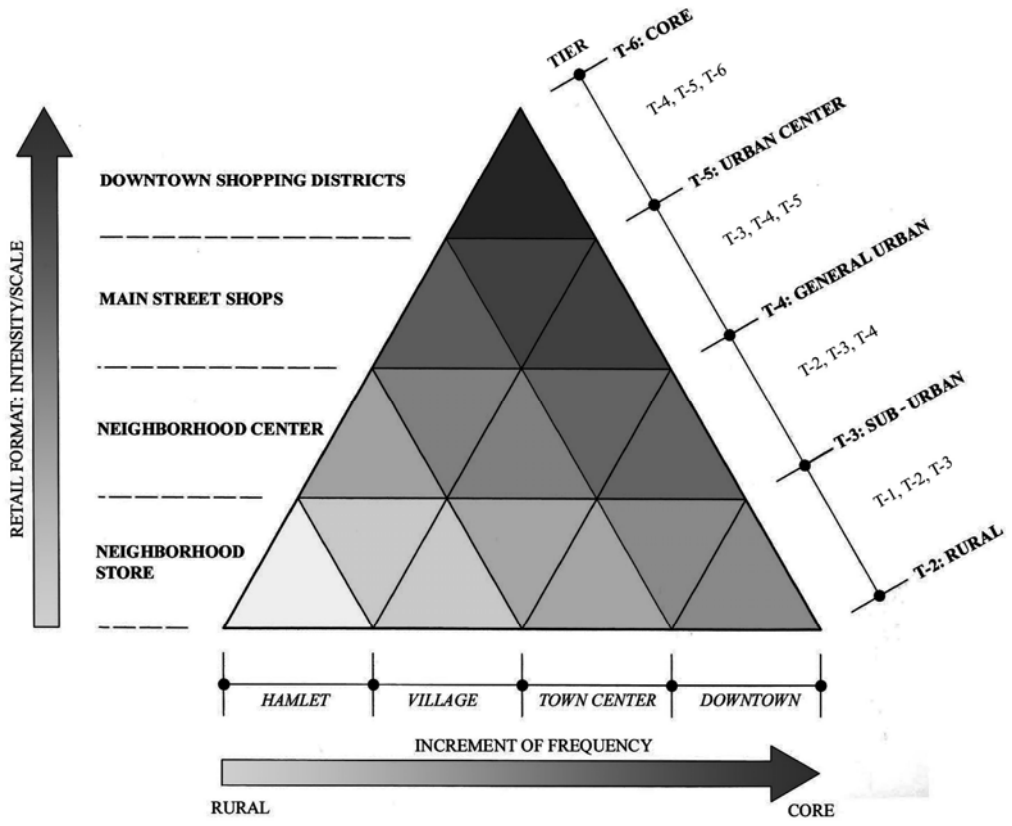
4. **Downtown Shopping District** – A regional center selling general merchandise (apparel, home furnishings and accessories) in significantly greater depth and variety than what might be offered in a Town Center setting. It offers a range of services and recreational facilities and a wide array of dining and entertainment options. It is typically anchored by one or more full-line department stores of not less than 75,000 square feet, with a total gross leasable area for the entire center ranging from 300,000 to 850,000 square feet.

Perhaps the most significant characteristic of a properly structured retail system in a Transect-based regional context is its propensity to evolve cumulatively, and in a successional fashion, consistent with its placement within the ascending zones of the Transect. It is cumulative because as communities grow and evolve, the retailers that are already in place continue to serve the same consumer market they have always served, while new retailers emerge to serve the needs of the growing market. And it is successional because the overall array of retail goods and services increases in both density and complexity, as the nature of the surrounding urban fabric does the same.

In this way, the diversity and sophistication of the retail offerings evolve along with the communities they serve: large towns can offer goods and services that small towns can't support, and cities can offer a range and sophistication of offerings that even large towns can't imagine. When this rational framework of urbanism and commercial activity is fully in sync, as represented by the Transect, the complexity and diversity of both the urban fabric and its attendant retail ecosystem evolve in complementary and predictable fashion, across the full spectrum of Transect zones.

This relationship can be graphically depicted as in the diagram below, which shows the supply of retail increasing in both breadth and diversity as urban types evolve from small-scale settlements to regional centers. In a Transect-based regional framework, retail center types can be more closely aligned to the specific consumer patterns and spending potential of the communities they serve, resulting in more consistent economic performance and greater resilience to changing market dynamics for the centers as a whole, and for the individual retailers contained therein. The diagram conceptually illustrates an optimal relationship structure between retail center types and Transect-

based community development types, as both ascend incrementally toward higher levels of complexity.



The diagram is pyramidal in form to reflect the fact that as the urbanism moves toward increasing levels of complexity and scale, it typically does so in a measured, incremental fashion, as indicated by the ascending order of community types along each side. However, regardless of where any particular "place" lies along that continuum, in terms of its transformative trajectory, there is always a single, corresponding, "highest order" retail type representing the most evolved level of retail goods and services that can be supported in conjunction with that community type, and/or urban structure, at that stage in its evolution.

The largest retail type is usually referred to as a regional center, though large urbanized areas can often support multiple regional centers, and in limited cases certain urban centers can even be extra-regional, national, or even international-level in terms of their consumer base.

As a schematic representation of reality, the diagram suggests that retail activity rarely occurs in T-1. In T-2, it happens only sporadically, and in a manner usually related to the

rural/agricultural nature of its regional T-2 context, such as a general merchandise or farm supply store. From T-3 through T-6, however, retail tends to occur in a more consistently rational and modulated basis – increasing in scale and diversity in correlation to the increasing density and complexity of the urban fabric around it, and completely consistent with the attributes of the consumer market that fabric includes.

One should also note that as retail grows cumulatively within the Transect (moving from T-2 to T-6), most of the retail types from the lower levels of the Transect will tend to reoccur, though at increasingly higher frequencies, in response to the greater population density and spending potential. This is suggested in the progression from Hamlet/T-2 through Downtown/T-6, as the lowest level of retail type, *Neighborhood Store*, might occur only at half-mile intervals in T-3, but would be present at increasing frequencies, for instance as the corner store, in T-4, T-5, and T-6.

This would again be the natural and appropriate response to the higher population densities and greater spending potential available at these more intensive urban levels. Also, each preceding increment of retail type will generally be embodied in the makeup of the subsequent one, such that the individual merchandise categories present in a *Neighborhood Center* will also be present in the tenant and merchandising composition of the *Main Street Shops*, and those present in *Main Street Shops* will be present in a *Downtown Shopping District*, and so on, until the highest order of retail type supportable by the market at any given point is achieved.

To understand how retail types mutate and evolve over time as cities grow within this framework, read the diagram starting from the lower left-hand corner and proceed toward the upper right-hand side. Each increment of growth progresses accordingly: a hamlet evolves over time into a village, and then a town, and finally a city. Consistent with that dynamic, each “higher-order” increment of urbanity results in a corresponding incremental rise to the next higher level of retail type (in addition to the new, full-spectrum layer of additional lower types below – another reason for the pyramidal form). However, to remain within the hierarchical framework of the Transect, at no time should either the scale or fundamental characteristics of that “higher-order” retail level outpace, or otherwise be inconsistent with, the corresponding successional stage of the community as a whole.

An anomaly of this type usually occurs only if there is a distortion in the system, such as those routinely engendered through the dendritic road networks of the style favored in post-war suburban settlement patterns. These anomalies often enable and encourage inappropriate retail center types and/or formats to exist outside of the market parameters that would otherwise be appropriate for their immediate urban context, or T-zone.

What this means, as a practical matter, is that the size and nature of the retail formats in a suburban market setting are more often dictated by the size of the road in front of the buildings than by the density and nature of the immediate surrounding fabric, as would typically be the case in a true urban consumer market context. The same is often true of the overall composition of goods and services in a suburban market.

The locational criteria for retail types in a traditional, extent urban fabric will be determined primarily by their placement within the transportation network and the number of households typically serviced by that network, both of which should bear a direct relationship to each other. Therefore, a full spectrum of street types and transportation modes, hierarchically deployed within a comprehensive regional urban framework, should also generate an equally full and diverse spectrum of retail types, serving everything from a neighborhood-oriented, pedestrian-based trade area to a full, regional-scale, retail consumer market. And, more importantly, all of these diverse types will likely be located precisely where they need to be in relation to their market contexts, in terms of frequency of need and increment of market share required to support them.

This arrangement is inherently efficient and self-regulating in terms of balancing location-specific retail demand and supply, as it encourages every retail type to locate in its most rational location within the urban structure, relative to its target market. It also encourages retail competition to take place primarily between retailers of similar sizes and resources, based on legitimate distinctions of quality, service, and value. And it reduces or eliminates unreasonable competitive advantages based primarily on the aforementioned distortions within the overall regional transportation network, which might otherwise encourage and permit over-scaled retail formats (i.e., big boxes).

In a conventional suburban market context, the trade areas of the retail center types often vary significantly due to variations in population density and household incomes (and hence spending potential). But the more typical determinant is the ability of particular retail centers to access the market by taking advantage of distortions in the existing transportation networks that occur when transportation planners, in an ongoing attempt to mitigate congestion, allocate an ever-increasing proportion of regional traffic flow onto a very limited network of over-sized arterials by simply increasing the number of lanes on those roads. This creates market dynamics that provide suburban retailers access to a larger consumer market potential than would otherwise be proximately available, resulting in disproportionately scaled formats relative to local demand.

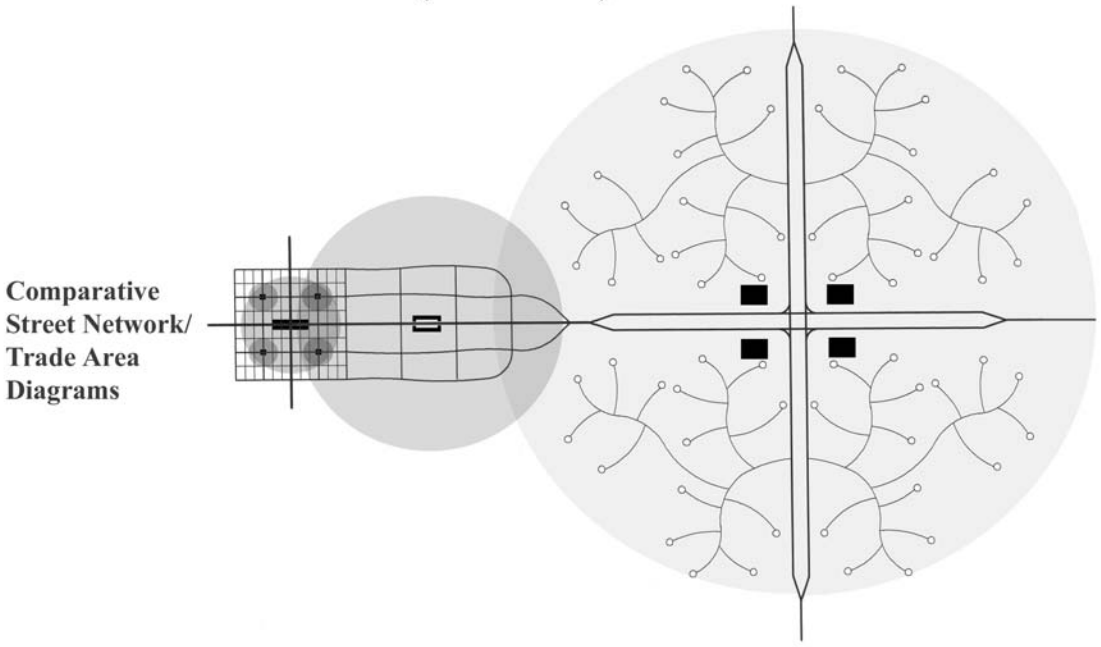
This physical disconnect between community and retailer, exacerbated by our over-reliance on infrequently spaced, large-scale arterials, creates a regional population of automobile-borne consumers – easily aggregated at major intersections in sufficient quantities to sustain virtually any sized retail box imaginable. As a result, “standard” retail formats have increased steadily and dramatically in size and associated trade area for the past 50 years, compounded by single-use zoning, which has helped to effectively sever the intrinsic spatial relationship between retail and the community it traditionally served.

Unfortunately, this model affords no direct, proportional spatial relationship between the size of the retailer and its immediate physical and market context. Reilly’s law of retail gravitation, which says, in effect, that larger concentrations of retail have larger spheres of influence (trade areas) than smaller concentrations, implies that all things being equal, in a generic physical context (suburbia) the larger box will always outperform a smaller

box in terms of controlling market share. That reality, along with the aforementioned trends in land-use planning that have encouraged that outcome, have diminished the inherent advantages of efficiency and sustainability for compact, mixed-use development, thereby threatening the viability of true neighborhood-oriented retail.

A clear, empirical illustration of the effect is demonstrated by the following conceptual diagram, which is based on a typical contemporary metropolitan area (in this case, it was empirically modeled on Omaha, Nebraska) and depicts 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. It illustrates the change from urban to suburban retail models, based on the phenomenon described above:

Regional Retail Scale Comparative
(Illustrative)



	T-4/6 Urban	T-3 Sub-Urban	Sprawl
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

The street network evolves from 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, and a reasonably well-integrated commercial component. But then, to the far right, it changes into full-blown sprawl, with low-density residential

development, segregated uses, and a dendritic residential street configuration that forces all trips for daily needs 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 this model produces.

Because the basic merchandise categories haven't changed – only the scale of the retail formats, in response to their 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 vary significantly across the three diagrams. However, the larger overall capture, combined with the much lower densities typical of sprawl, results in substantially larger trade areas, geographically speaking, and in proportionally and substantially more vehicle miles per trip to satisfy the same fundamental retail needs.

Conclusion:
The use of a Transect-based model allows for the creation of regional plans that balance transportation infrastructure against regional consumer demand by means of a finely articulated urban fabric that both acknowledges and effectively responds to the specific needs of a community, regardless of scale, all the way from a rural hamlet to a regional center. When tied to appropriately coupled land use and transportation planning, it provides an ideal framework for integrating a full complement of uses, including retail, into a comprehensively vibrant, equitable, and sustainable human habit. In other words, retail – in a traditional urban context – is by nature both self-regulating and self-correcting, thereby eliminating or avoiding many of the problems typically associated with large-box retail today.

Application of Transect planning at the regional level not only provides a clear framework in which new development may take place, but it can also help rationalize existing development by providing appropriate metrics to guide the recalibration of existing uses based on idealized standards: Where retail concentrations exist out of proportion relative to their legitimate places within the Transect, remedial actions can be justifiably pursued to help put the retail back into more appropriate balance and scale. This can be accomplished by gradually reducing the amount of retail, by adding additional density of other uses, or ideally by a combination of both.