

RETAIL: SUSTAINABLE COMMERCE

SMARTCODE MODULE

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It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change.

Charles Darwin

RETAIL: SUSTAINABLE COMMERCE

Commerce is the systematic production and distribution of goods and services within an organized physical and economic framework, in response to market demand. Sustainable Commerce adds explicit spatial and environmental parameters to this definition, for the consumer side of the equation as well as the producer. The net effect is the creation of a relationship between them, and between the products produced and consumed. This relationship could be maintained indefinitely, accommodating succession, without long-term cumulative impacts to the human and natural systems that make the provision of those goods and services possible.

Globalization is an economic tool optimized around production efficiencies. It can generate unintended and incidental market distortions related to the goal of sustainability, by creating spatial anomalies that mask its hidden environmental and societal impacts in the form of externalities -- real costs that are borne neither by the producer nor the consumer, but by incidental third parties associated with the production and delivery chain. The long-term consequences of these externalities increase the tangible net costs, in both human and natural capital, associated with the production and delivery of those goods. They also diminish their intrinsic value to the consumer, either in terms of the quality of the products consumed, such as foodstuffs, and/or in terms of potential additive value to the local economy.

Therefore, Sustainable Commerce aims, at its most fundamental level, to restore the traditional spatial relationships between producers and consumers. It does so with the specific intent of reconstituting systemic models of goods production and distribution within a rational and efficient regional framework that, by its very nature, minimizes its collective impacts to the planet, while providing the broadest possible definition of sustenance to the community it serves.

Because the SmartCode already provides for the detailed placement of the building on the lot, the lot's placement within the block, the block within the neighborhood, etc., even for commercial uses, these Sustainable Commerce Intents and Standards focus on providing defensible metrics within which the nature, type, and allocation of commercial goods and services should be considered in any new or infill development.

ARTICLE 1. GENERAL TO ALL PLANS

These Intents are intended to provide broad systemic guidelines to help inform the application of the broader SmartCode. They may be added to the main Intent section of the base code and/or to a Comprehensive Plan, and/or remain within a section or appendix applicable specifically to Sustainable Commerce.

One of the key objectives of this module is preventing and remediating conventional suburban settlement patterns that, by their very nature, encourage the exploitation of spatial anomalies in the urban fabric. Such breaks in traditional urban patterns permit and encourage the development of conventional suburban retail types whose underlying business models are at odds with the fundamental goals of sustainable urbanism.

The entitlement to provide Retail goods and services should only be permitted upon the credible demonstration of the ability to meet the Intent of this portion of the code.

ARTICLE 2. REGIONAL SCALE PLANS

These standards provide for the assignment of retail center types within the nesting scale relationships of Regional Sector to Community Unit to Transect Zone in accordance with the principles of Sustainable Commerce. Additionally, they aspire to support and encourage the local production and consumption of goods and services to the fullest extent practical, based upon regional climatic conditions and local resources, and on the preservation and patronage of locally-serving agriculture.

ARTICLE 3. NEW COMMUNITY PLANS

Community plans should be configured, individually and collectively, to support a rational and efficient regional framework for goods production and distribution, for products produced both locally and extra-regionally, and in such a way as to minimize environmental impacts and discourage exploitative practices, while providing the healthiest, freshest food possible to the residents of those communities.

ARTICLE 1. GENERAL TO ALL PLANS**1.X SUSTAINABLE COMMERCE STANDARDS****INTENT**

The Transect-based Sustainable Commerce Module provides a regional framework for allocating Retail offerings at appropriate scales relative to consumer demand and urban structure. The Intent and purpose of this Module is to enable, encourage, and qualify the implementation of the following principles:

THE REGION

- a. That new development should provide reasonable and convenient access to healthy food and basic services, necessary for daily life, without putting undue stress on either the end consumer or the environment.
- b. That provision of Retail goods and services should be distributed within the region in direct coordination with recognized settlement patterns as provided in this Code, such that those goods and services are provided at scales and frequency of occurrence appropriate for nearby transportation options and consumer demand.

THE BLOCK AND BUILDING

- a. Building Scale Plans should reflect, in scale, location and disposition, the goal of reintegrating Retail into the physical and social fabric of the neighborhoods and communities that it inhabits, such that the spatial, economic, and societal welfare of both the producer and consumer are brought into mutually supportive alignment.

ARTICLE 2. REGIONAL SCALE PLANS**2.X GENERAL TO ALL ZONES T2, T3, T4, T5, T6**

- 2.X.1 New Retail developments should complement and enhance existing Retail offerings, consistent with the Intent of this Code.
- 2.X.2 Retail offerings **shall** be arranged hierarchically throughout the region in the form of Corner Stores, Neighborhood Shops, Main Street Shops, and Downtown Shopping Districts, at thresholds of density and increments of scale as provided in Table R-SC1.

ARTICLE 3. NEW COMMUNITY SCALE PLANS**3.X SPECIFIC TO ZONES T3, T4, T5, T6**

- 3.X.1 Retail offerings **shall** be situated within the urban fabric in accordance with the general principles illustrated in Table R-SC2, and the Density thresholds described in Table R-SC3.
- 3.X.2 Main Street Shops and Downtown Shopping Districts **should**, unless justified by intervening circumstances consistent with the Intent of this Code, be located at the seams between Community Units, and along Thoroughfares that provide the maximum visibility and access relative to the provisions of this Code.
- 3.X.3 Each Retail center shall be sized and/or located consistent with its appropriate Transect Zone. It shall not be sited solely on the basis of traffic volume, nor shall any Community Plan and/or Thoroughfare be configured with the sole intent of concentrating traffic and/or aggregating consumer markets for the express purpose of capturing market share in excess of that warranted by Density and proximity, as shown on Table R-SC1 and Table R-SC3.
- 3.X.4 The only exception to Section 3.X.3 will be in the presence of transit, to the extent that

5.X.X BUILDING CONFIGURATION

This provision should not undermine the intent of any two-story minimum that may be calibrated for corners or for a T-4 zone in its entirety, nor the Function designation calibrated on Table 10. It may useful to establish a maximum percentage of buildings within a T-zone or on each block that may be permitted this Warrant, and write that into Article 3.

it may be expected to provide a net inflow of consumers, based upon its relationship to the larger regional market and its consistency with the Intent of this Code.

ARTICLE 4. INFILL COMMUNITY SCALE PLANS

4.X SUSTAINABLE COMMERCE STANDARDS

- 4.X.1 The provision of goods and services at the level of the neighborhood **should** allow for the remedial balancing of their supply relative to their demand.
- 4.X.2 In the case of a demonstrated pre-existing oversupply of goods and services relative to demand, other uses **shall** be required in excess of the ideal proportions described in this Code for the applicable plan area, until such time as an effective rebalancing of supply and demand is achieved. The applicant shall demonstrate a legitimate demand for those goods and services.
- 4.X.3 Community Units shall be configured to provide a contiguous network of fine-grained Thoroughfares and Blocks that prevents the inadvertent aggregation of consumer potential in excess of what may be locally sustained, and that ensures effective horizontal connectivity and Mixed Use to encourage patronage within the Pedestrian Shed.

ARTICLE 5. BUILDING SCALE PLANS

5.X BUILDING CONFIGURATION

- 5.X.X While vertical Mixed Use above Retail is encouraged where there is sufficient market support to justify the higher construction costs, limited single-story Retail shall be allowed in T-4 by Warrant.

TABLE R-SC1: RETAIL TYPOLOGY

The classifications and center attributes listed in Table R-SC1 for this Retail Typology are roughly analogous to the classifications that the Urban Land Institute (ULI) and International Council of Shopping Centers (ICSC) assign to conventional suburban shopping centers, but are retitled here to reflect distinctions in urban size and format when applied in a sustainable urban context instead.

Actual consumer demand and shopping behaviors, which collectively define the basic tenant mix of goods and services offered for each type, remain approximately equivalent to their conventional suburban counterparts. However, the traditional urban types described here are based more explicitly -- in location, format, scale and size of assumed trade area -- on recognized urban settlement patterns and densities as described in the SmartCode. They are assumed to draw from a more compact and tightly defined catchment, relating primarily to the density and proximity of its consumer market. By contrast, conventional analyses rely primarily upon the contrived consumer access represented by vehicle counts.

In this table, an ideal size is listed for each category, which assumes that changes in market density or characteristics (i.e., Transect Zone), will be directly reflected in the frequency and spatial allocation of each type. These differ from the typical size ranges of their conventional equivalents. For this reason, only the ideal size should be used to calibrate and entitle new commercial development for each T-zone.

Each retail center type is generally defined by its tenant mix and Gross Leasable Area (GLA), and is ideally restricted in both its regional and community allocation, i.e., in size, type, and frequency of occurrence, relative to its Transect Zone. In this way, a retail typology exists within a rational framework intended to promote self-regulating growth and long-term sustainability.

General While each Transect Zone has an allowable “highest order” retail type associated directly with that zone, each preceding “lower order” retail type also still exists within that zone, but at more frequent intervals, based on a more compact trade area. However, only the frequency of lower-order types should increase, not their scale. Because the same kinds of goods and services offered in a Corner Store type are still needed in higher density neighborhoods, it can be found in all Transect Zones from T-2 to T-6. Conversely, the Downtown Shopping District is designed to serve only the largest of trade areas, and therefore can only be located in T-6. This progression accurately reflects the successional nature of true urbanism.

Corner Store This type is roughly equivalent to the ULI classification of Convenience Store. The Corner Store is a single building located in a convenient location, usually on a corner of a main intersection in sub-urban areas (T-2, T-3), and on corners at more frequent intervals as determined by market density in more urban areas (T4, T-5, T-6).

Neighborhood Shops This type is roughly equivalent to the ULI classification “Neighborhood Shopping Center.” Neighborhood Shops can occupy one side of a street, both sides, or an intersection, and usually line the entire block and are typically located along a primary thoroughfare between adjacent residential areas, and include merchandise found in Corner Stores but with more variety. Neighborhood Shops are permitted in T-5 and T-6, as well as the T-4 Open subzone (see Table 10 for Open Function standards).

Main Street Shops This type is roughly equivalent to the ULI classification “Community Shopping Center.” Main Street Shops have a similar form to Neighborhood Shops but may extend beyond one block, often turning a corner and extending down the perpendicular block, and are typically located at primary intersections and transit nodes. Main Street Shops are permitted in T-5 and T-6, and also include merchandise and uses found in Neighborhood Shops.

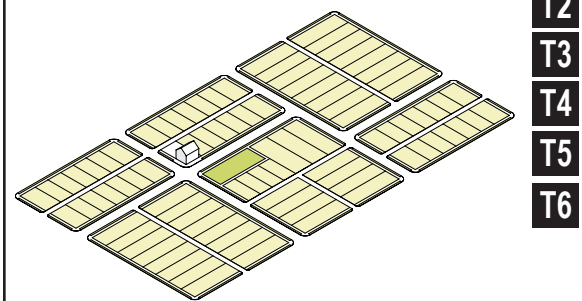
Downtown Shopping District This type is roughly equivalent to the ULI classification “Regional Shopping Center.” The Downtown Shopping District extends over several blocks, usually on either side of two major intersecting thoroughfares, and include the merchandising categories and uses that occur in the three other retail types. The Downtown Shopping District is permitted only in T-6 (or in fact *becomes* the T-6 zone), and may occur in multiple locations in a polycentric metropolis. Still, even the largest American cities usually exhibit one primary center corresponding with either the highest intensity of employment or residential or both, such as the cores of Center City Philadelphia or the Chicago Loop. These traditional downtowns, like the RCD Community Unit, also include T-4 General Urban fabric and T-5 Urban Center corridors, though in Philadelphia and Chicago these areas are generally more urban in character than the uncalibrated T-4 and T-5 of the model SmartCode.

Thus a Downtown Shopping District may sit astride multiple neighborhoods, or may comprise one or more neighborhoods in and of itself, consistent with Community Units structured by pedestrian sheds.

Table R-SC1: Retail Typology Form-based Graphics. This table describes and illustrates the types of Retail in an urban context and the Transect Zones in which they may be allocated.

Corner Store: A Retail business that provides a convenient location for quick purchases from a small inventory of diverse consumer products (predominantly food and incidental convenience items). It typically has a GLA of less than 5,000 square feet, with convenient parking and access to their immediate consumer market, consistent with their T-zone designation, and with extended hours of operation.
Urban ideal: <5,000 square feet.

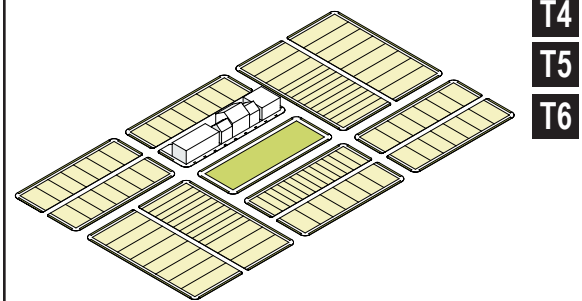
ULI/ICSC equivalent: Convenience Store



Neighborhood Shops: A collection of stores and Commercial establishments providing personal services and convenience goods in the immediate neighborhood. Usually anchored by a grocery store/supermarket and/or drug store, and often including one or more local restaurant or cafes, it has a GLA of 25,000-80,000 square feet.
Urban ideal: 60,000 square feet.

Trade Area Radius: 1/2 - 3 miles, depending upon T-zone

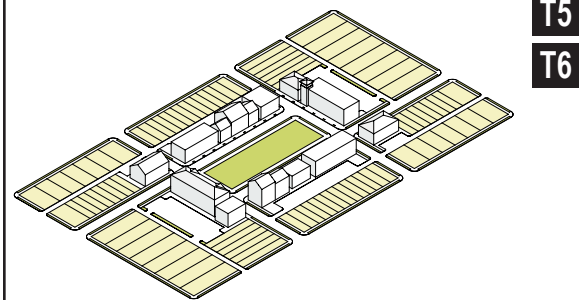
ULI/ICSC equivalent: Neighborhood Center



Main Street Shops: A supermarket and drug store-anchored center providing for a range of daily needs and personal services to the surrounding neighborhoods. Typically sized at 120,000-400,000 square feet of GLA, it may include a junior department store, an expanded range of shopping and specialty goods, and several food establishments at a variety of price points and service levels.
Urban ideal: 280,000 square feet.

Trade Area Radius: 2-5 miles, depending upon T-zone

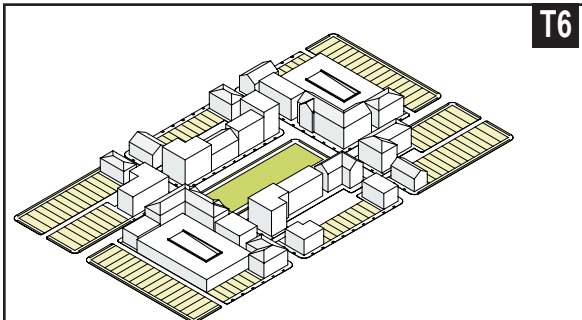
ULI/ICSC equivalent: Community Center



Downtown Shopping District: A regional center selling general merchandise in significantly greater depth and variety than what might be offered in a Main Street 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 two or more full-line department stores of not less than 75,000 square feet, with a total GLA for the entire center ranging from 300,000 to 850,000 square feet, or more.
Urban Ideal: 500,000 square ft.

Trade Area: 5 miles. A single metropolis may contain several DSDs.

ULI/ICSC equivalent: Regional Center



**TABLE R-SC2: THE RETAIL TRANSECT
ILLUSTRATIVE SPATIAL NETWORK DIAGRAM**

The rural-to-urban Transect, on which the SmartCode is based, provides a framework within which retail uses can be appropriately allocated. It balances the availability of goods and services with the level of consumer demand, such that those items that are more frequently needed and consumed are more immediately and frequently available.

Because the Transect provides a framework for coordinated land use and transportation infrastructure, retail uses can be rationally distributed in both scale and location, creating a locally efficient and self-regulating system. As such, it is structured so that retail can evolve and grow over time, in concert with the growth and expansion of the associated neighborhood, town, or city.

This growth occurs both cumulatively and successionally. Merchants who are already in place may continue to serve the same consumer market they have always served, while new retailers move in to supply the increasing demand that growth provides. As the urban settlement increases in both density and complexity, the retail offerings do the same.

The four retail types – Corner Store, Neighborhood Shops, Main Street Shops, and Downtown Shopping District – are structured such that they fit into the Transect exactly where the demand for the goods and services offered by each type is most likely to occur.

Table R-SC2 illustrates the practical characteristics of this Transect-based retail system: The diagram is pyramidal in form to illustrate the successional nature of urban maturation in terms of density and complexity over time. This shows how the same basic retail types should occur within existing urban fabric, based upon predictable metrics that can be empirically and statistically demonstrated. The smaller diagrams to either side of the primary diagram show the hierarchical ascension of the T-zones over time. (T2 and T3 are combined only to simplify the retail alignment; the diagram does not indicate any actual spatial relationships, as every plan will be customized for the locale.)

The Transect Zones run from the bottom left to the apex in the upper right, ascending from T-1, where no retail types are permitted, up to T-6, where all four retail types are permitted, at frequencies related to their demand. The lines running horizontally left to right indicate the retail type, so that reading across the diagram left to right along each retail type indicates in which Transect Zone it is permitted,

while reinforcing the idea that as density increases, from left to right along the bottom, the frequency of each retail type increases, but not its size. For example, the Corner Store might occur only once every mile in a combined T-2/T-3 area, but would increase in frequency as density increases in T-4, T-5, and T-6.

TABLE R-SC3: RETAIL TYPES

The lower table restates the basic types of Table R-SC1 in a non-visual format, offering a choice to calibrators depending on the style of the customized code. It adds the density thresholds of the lowest applicable T-zone, to ensure that the frequency and scale of each type occurs in relation to the density and proximity of the associated consumer market. These do not precisely match the minimum By Right densities of either the v9.2 or v10 versions of the model SmartCode, but may guide the calibration of the code for community scale and regional plans.

The intended result is relatively low Vehicle Miles Traveled (VMT) and a diverse retail culture.

Table R-SC2: Retail Transect Illustrative Spatial Network Diagram.



Table R-SC3: Retail Types.

	T1	T2	T3	T4	T5	T6	SD	Specifics
Corner Store		■	■	■	■	■		Urban GLA Ideal: <5,000 square feet Rooftop Threshold: TBD Trade Area: 1/2 mile Density of T-Zone: n/a Min. # of Intersections/1/4 mile radius: TBD
Neighborhood Shops				□	■	■		Urban GLA Ideal: 60,000 square feet Rooftop Threshold: TBD Trade Area: 1.5 mile Density of T-Zone: ≥ 4 units/acre Min. # of Intersections/1/4 mile radius: TBD
Main Street Shops					■	■		Urban GLA Ideal: 280,000 square feet Rooftop Threshold: TBD Trade Area: 3 miles Density of T-Zone: ≥ 8 units/acre Min. # of Intersections/1/4 mile radius: TBD
Downtown Shopping District						■		Urban GLA Ideal: 500,000 square feet Rooftop Threshold: TBD Trade Area: 5 miles Density of T-Zone: ≥ 16 units/acre Min. # of Intersections/1/4 mile radius: TBD

THOROUGHFARE TYPES / FRONTAGES

The dendritic, disconnected thoroughfare patterns of post-war sprawl developments have created a market framework based on spatial anomalies relative to the market, i.e., relative to where people live. This conventional suburban sprawl model has competed with the traditional regional commerce model that was based on networked, walkable thoroughfare patterns. The latter evolved largely before the automobile dominated American life, and before Euclidean separated-use zoning. As a result, today retail types and their associated attributes are dictated primarily by the size of the thoroughfare in front of the box, rather than by the density and urban character of the immediately surrounding context.

To restore the functioning of mixed use within the fine-grained networks of existing or new traditional urbanism, locational criteria should be based primarily upon the placement of commerce within the hierarchical thoroughfare network and the number of households and places of employment immediately serviced by that network.

The dependence of consumers upon the automobile, coupled with the associated low density of postwar development, generates market dynamics which routinely provide conventional suburban retailers access to a larger customer market potential than would otherwise be available nearby, resulting in disproportionately scaled formats relative to local demand. The result is high rates of VMT and, at the same time, obscured and externalized social and environmental costs associated with mass-produced consumer goods in overscaled formats.

The value, then, of a Transect-based Sustainable Commerce model lies in its comprehensive approach, which acknowledges a hierarchical thoroughfare network and the appropriate frontages for Retail, all supporting the SmartCode's transect-based Community Units and larger settlements comprised of them.

TABLE R-SC4

This table shows the thoroughfare types each retail center type should enfront, which should be carefully coordinated in the planning and design of any new community or infill development. In some cases, the A-Grid and B-Grid may come into play. See Section 3.9.1a and Section 4.7.1a in the base SmartCode.

In this table, some of the thoroughfares are not indicated for some retail types that are permitted generally in their Transect Zones as shown on Table R-SC1 and R-SC2 of this Module. For example, the Street Assembly ST-60-34 may occur in T3, T4, and T5. Yet here, Main Street Shops are not indicated, although they are generally permitted in T5. This is not a conflict; rather it is a finer degree of assignment than the T-zone as a whole, due to the fact that the ST has only a 6-foot sidewalk on both sides. The CS-60-34, at the same ROW and pavement width, is preferable for more intense retail types because it has a 13-foot sidewalk. It therefore provides more room for cafe tables, bicycle racks, benches, and more foot traffic generally.

In some cases, the restriction to less-intense retail types is due to the thoroughfare being one-way, which is usually not advisable for Main Street Shops and Downtown Shopping Districts. Exceptions might include the short side blocks and narrow streets in the shopping areas of tightly-gridded cities, like London or Portland.

Conversely, while Corner Stores are permitted in all zones, they are not indicated here for the wider Commercial Streets, as they usually function better if placed away from larger-scale competition and higher urban intensity.

During calibration, care must be taken to cross-check with the other relevant tables. If desired, this table may become advisory only, and moved to an appendix.

Table R-SC4: Thoroughfare Frontages. This table shows the Thoroughfare types that each Retail type may enfront.

THOROUGHFARE	Corner Store	Neighborhood Shops	Main Street Shops	Downtown Shopping District	
RL-24-12					
RA-24-24					
RD-50-14					
RD-50-18					
RD-50-24	■				
ST-40-19		■	■		
ST-50-26	■	■			
ST-50-28					
ST-50-30	■				
ST-60-34	■	■			
CS-50-22	■	■			
CS-55-29	■	■			
CS-60-34		■	■	■	
CS-80-44		■	■	■	
CS-80-54		■	■		
CS-100-64		■	■	■	
AV-75-40	■	■	■		
AV-90-56	■	■	■		
BV-115-33	■	■	■	■	
BV-125-43	■	■	■	■	
BV-135-33	■	■	■	■	
BV-135-53	■	■	■	■	

TABLE R-SC5: RETAIL MIX

A transect-based determination of primary shop types and their merchandising categories can help to minimize spatial, scale and format anomalies that require all customers to arrive by car, encouraging sprawl patterns in both retail and residential realms. An example is a large free-standing department store in a low-density semi-rural market context.

This table helps ensure a more fully integrated retail allocation based on the density and proximity of its associated consumer market.

In addition to these merchandise categories, there are a number of quasi-retail, cultural and civic uses, such as libraries, post offices, museums, and theaters, that can also function as traffic generators, or “attractors.” When strategically placed within the mixed use area, they can enhance the market performance and appeal of the associated retail mix.

As with the retail center types, these attractors typically relate in scale and sophistication to their location along the Transect. The locally-serving examples are appropriately situated in lower T-zones, while more regionally-scaled attractors are positioned in the higher T-zones. Further examples may be found in the Civic portion of Table 12 Specific Function and Use.

When the SmartCode’s Article 2 planning framework is employed, regional plans should account for differences in intensity and purpose of the different Community Unit types, each of which is an aggregate of several Transect Zones that themselves may have been calibrated to different intensities from one municipality to another. Those differences may affect the relative “attractor” strength, or overall drawing power, of one settlement with respect to another, and should be considered when allocating retail across the region.

Table R-SC5: Retail Mix. This table shows the services and uses that can be included in each retail type.

[illegible]

SMARTCODE ANNOTATED

These annotations are advisory only. The SmartCode itself appears only on the right side of each spread.

ARTICLE 7. DEFINITIONS OF TERMS

RETAIL: SUSTAINABLE COMMERCE

Downtown Shopping District: a regional center selling general merchandise in the highest depth and variety of all Retail types. It offers a range of services and recreational facilities and a wide array of dining and entertainment options.

GLA: see **Gross Leasable Area**.

Gross Leasable Area (GLA): the measurement used for uniform comparison and accurate measurement of tenant spaces in Retail centers. GLA is the total floor area designed for the tenant's occupancy and exclusive use, for which tenants pay rent, including sales areas and integral stock areas. It includes basements, mezzanines, and upper floors, is expressed in square feet and is measured from the centerline of joint partitions and from outside wall faces.

Department Store: a single-format store type comprised of multiple, distinct specialty departments, offering a wide range of merchandise categories, with broad consumer appeal. It typically caters to a regional or super-regional market.

Neighborhood Shops: a small collection of commercial establishments providing personal services and convenience goods. Usually anchored by a grocery or drug store, this small center is intended to serve only the surrounding neighborhood.

Corner Store: a Retail business that provides a convenient location for quick purchases from a wide array of products, predominantly food and sundries.

Main Street Shops: a supermarket-anchored center providing for a range of daily needs and personal services, and may include a junior Department Store and several food establishments at a variety of price points and service levels.

Trade Area: the area containing people who are most likely to purchase a given class of goods or services from a particular merchant or group of merchants.