The Rural-Urban Transect

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Quality of life. HoustonTomorrow
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A natural transect
**T1 NATURAL ZONE**

The natural zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology, or vegetation.

**T2 RURAL ZONE**

The rural zone consists of lands in open or cultivated state or sparsely settled. These may include woodland, agricultural lands, grasslands, and irrigable deserts.

**T3 SUB-URBAN ZONE**

The sub-urban zone, though similar to conventional low-density suburban house areas, differs by allowing home occupations. Planting is naturalistic with deep setbacks. Blocks may be large and the roads irregular to accommodate natural conditions.

**T4 GENERAL URBAN ZONE**

The general urban zone is a denser and primarily residential urban fabric. Mixed-use is usually confined to corner locations. It has a wide range of building types: single, sideyard, and rowhouses. Setbacks and landscaping are variable. Streets typically define medium-sized blocks.

**T5 URBAN CENTER ZONE**

The urban center zone is the equivalent of a downtown, including building types that accommodate retail, offices, rowhouses, and apartments. It has a network of streets, with wide sidewalks, steady street tree planting, and buildings set close to the frontages.

**T6 URBAN CORE ZONE**

The urban core zone is the equivalent of a downtown. It contains the tallest buildings, the greatest variety, and unique civic buildings in particular. It is the least naturalistic; street trees are steadily planted and sometimes absent.

**SD SPECIAL DISTRICTS**

Specialized districts are those areas with buildings that by their intrinsic function, disposition, or configuration, cannot conform to one of the six normative transect zones. Typical districts may include institutional campuses, refinery sites, airports, etc.

**EXISTING ENVIRONMENTAL THEORY**

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<thead>
<tr>
<th>Natural Diversity</th>
<th>Total Natural &amp; Socio-Economic Diversity</th>
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**PROPOSED THEORY I**

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The Transect technique is derived from ecological analysis where it is applied to present the sequence of natural habitat from shore-dune-upland or wetland-woodland-prairie. It is a system of classification deploying the conceptual range rural-to-urban to arrange in useful order the typical elements of urbanism. The transect is a natural ordering system, as every urban element easily finds a place within its continuum. For example, a street is more urban than a road, a curb more urban than a swale, a brick wall more urban than a wooden one, an allee of trees more urban than a cluster. This gradient when rationalized and subdivided, becomes the basis of the Smartcode, the basis of a common zoning system.

The continuum of the Transect, when subdivided, forms the basis of the zoning categories: Rural, Sub-Urban, General Urban, Urban Center and UrbanCore.
## Indices of Diversity by Transect

### Indices of Diversity

#### Natural Diversity

<table>
<thead>
<tr>
<th>Existing Environmental Theory</th>
<th>Ecological Analysis</th>
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#### Cultural Diversity

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#### Total Natural & Socio-Economic Diversity

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Downtown Waller now
Downtown Waller tomorrow

- Curb extensions to shorten the crossing distance
- Improved crosswalks
- Streetscape improvements
- Wide pedestrian walks
- Civic Square
- Preserved historic structure
- On-street parking
- Key St
- Main St
- Buildings addressing the street frontage
Food Production Along the Transect

Every dwelling along the transect will contribute in some measure to food production, either by labor or by wages. Owner’s association agreements regarding dedicating the funding which is normally allocated to landscape will be for agriculture subsidies. Producing food on-site allows:

- Greater independence from mass-produced food, buffering from petroleum shortages, less pressure on government
- Control over food processing, including: pesticides and other additives to food, humane treatment of animals
- Social Benefits of including non-driving members of society in economy
- Economic Self-Sustainability: food is a reliable commodity, particularly when the means to preserve it through with Value Added Agriculture is considered
Agricultural Urbanism – by Transect
Agricultural Urbanism Project - Hertfordshire, UK
Agricultural Urbanism Project – Southlands, B.C. Canada
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