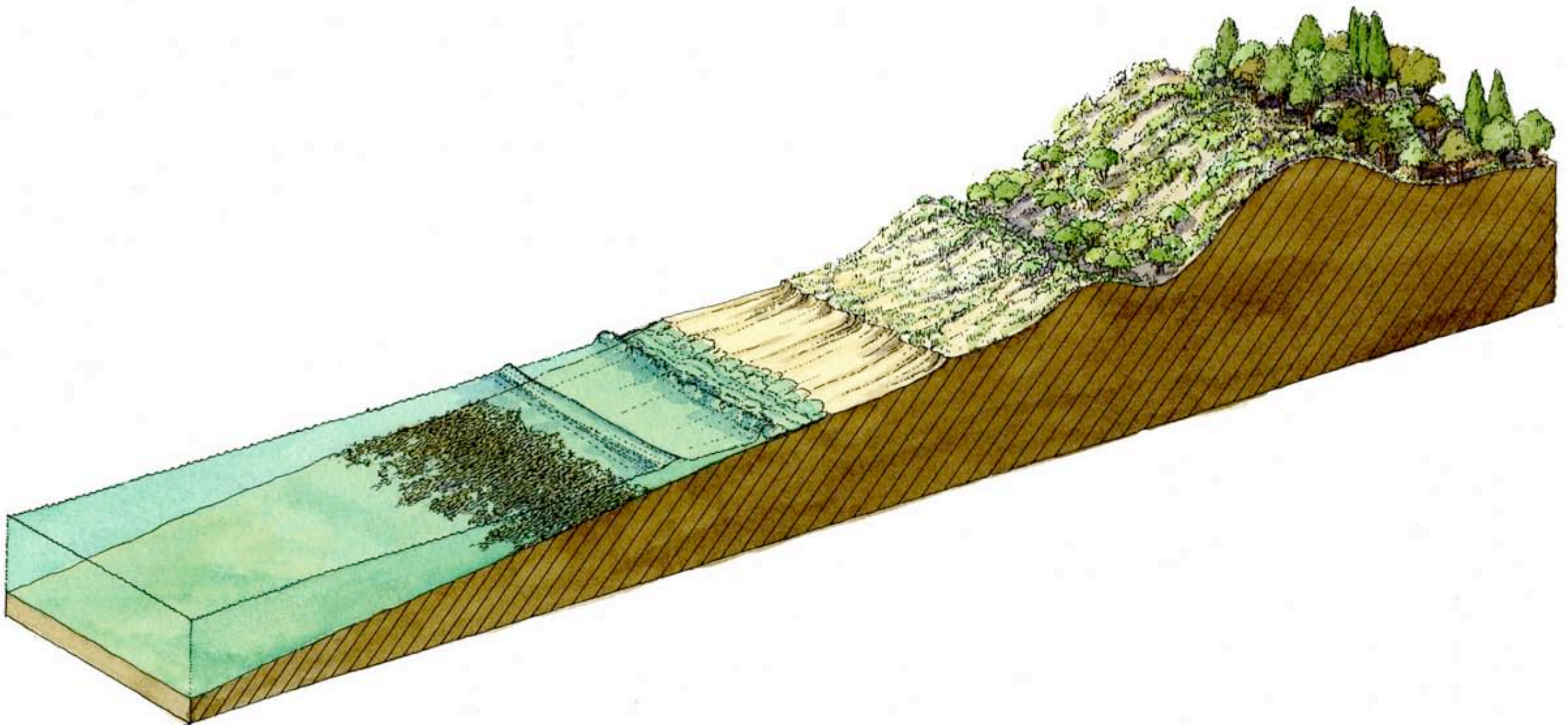
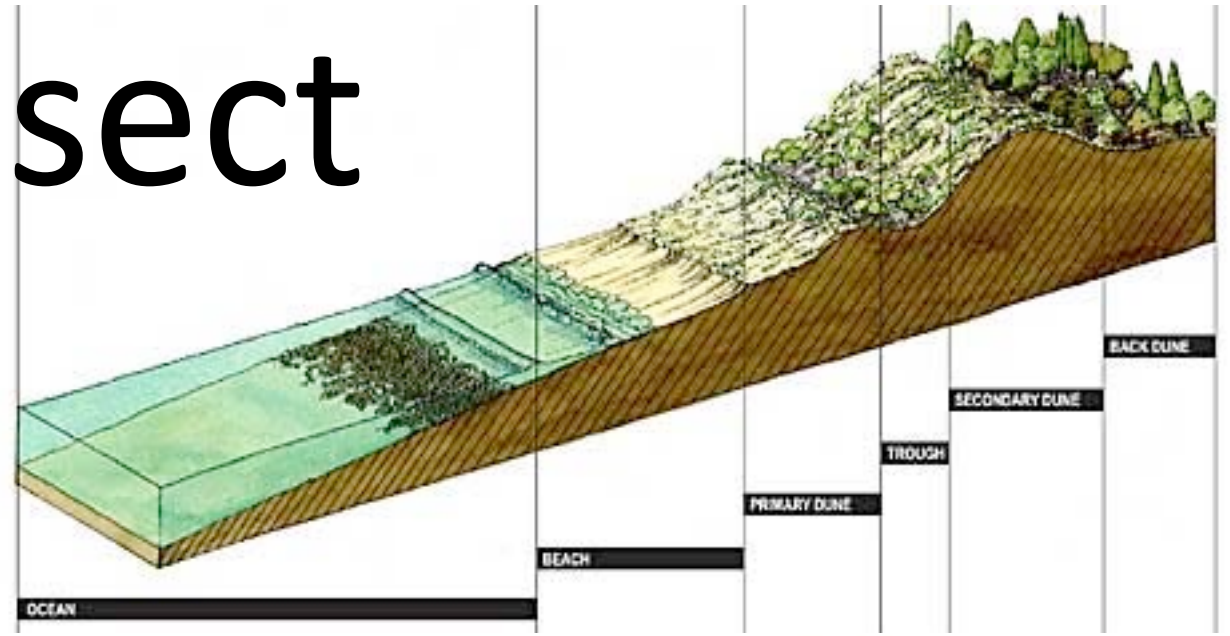




The Rural-Urban Transect

David Crossley

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.

Transect images and info courtesy Duany Plater-Zyberk

Complete montage by Gulf Coast Institute

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 main street, including building types that accommodate retail, offices, rowhouses and apartments. It is usually a tight 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.

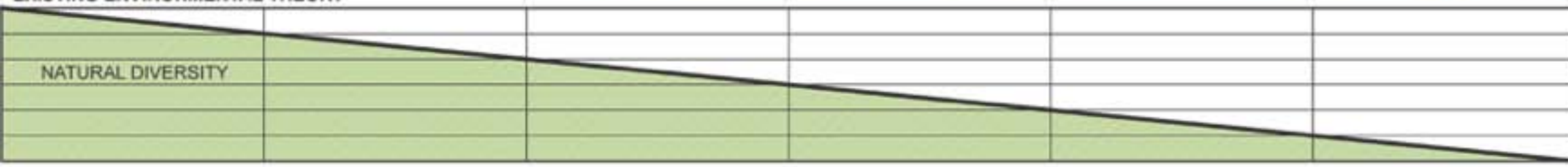
SD SPECIAL DISTRICTS

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.

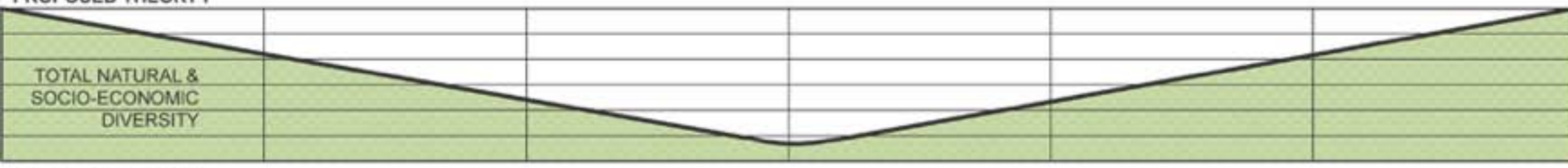


Drawings courtesy Seth Harry

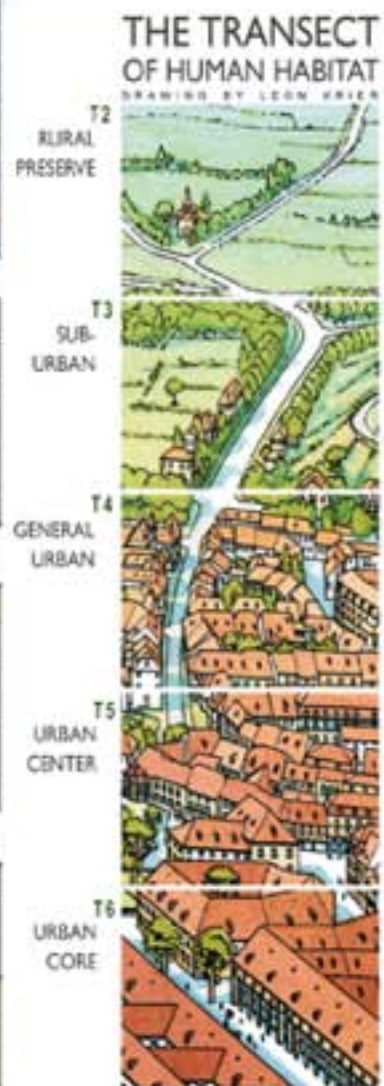
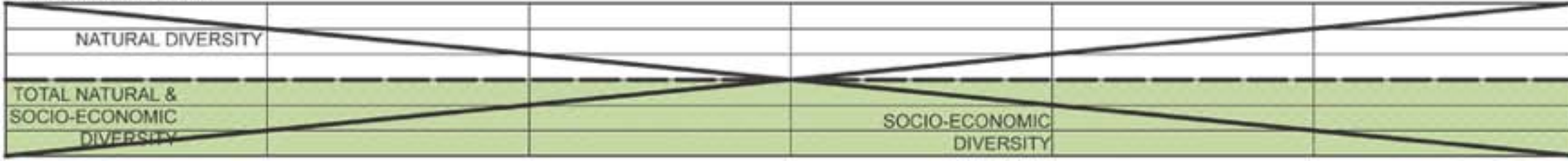
EXISTING ENVIRONMENTAL THEORY

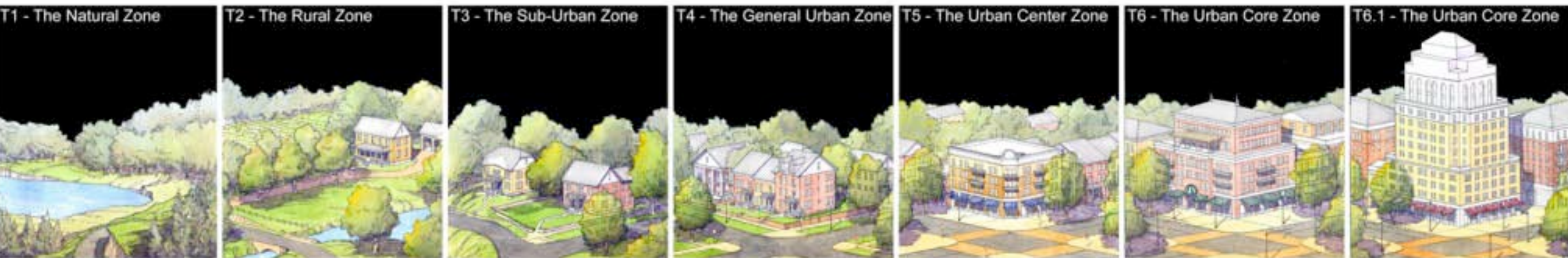


PROPOSED THEORY I



PROPOSED THEORY II





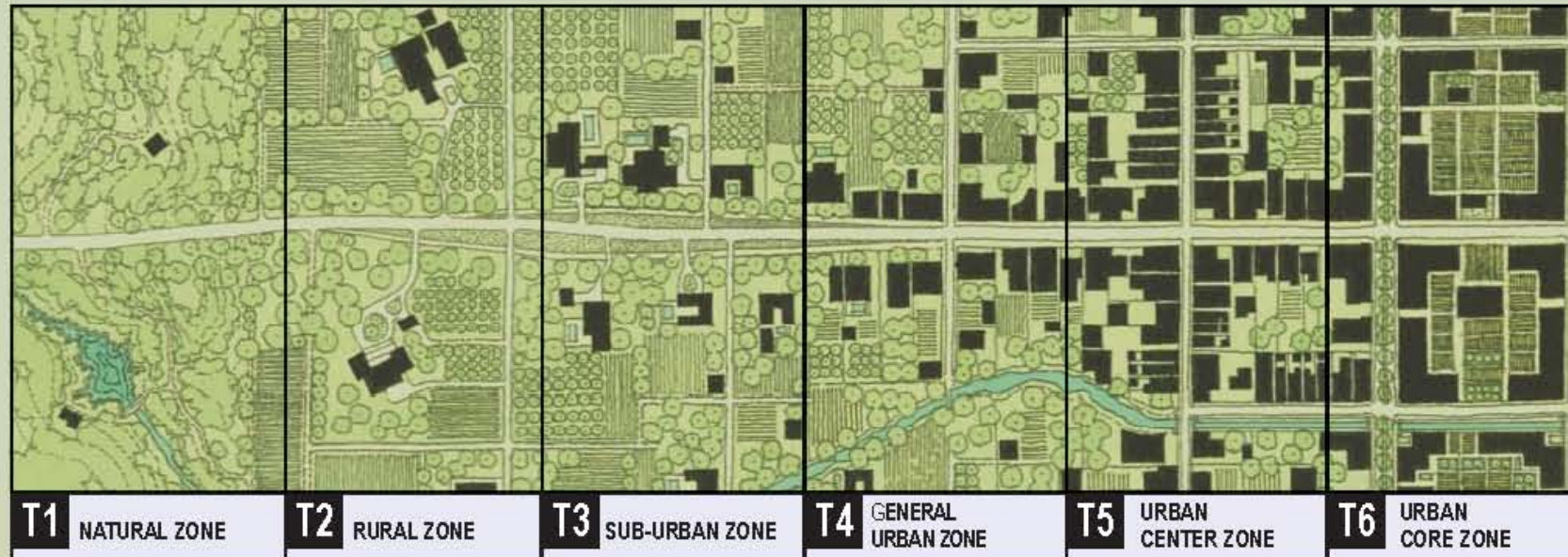
The **Transect** technique is derived from ecological analysis where it is applied to present the sequence of natural habitat from shore-dune-upland or wetland-woodland-prairie. It is a system of classification deploying the conceptual range rural-to-urban to arrange in useful order the typical elements 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.

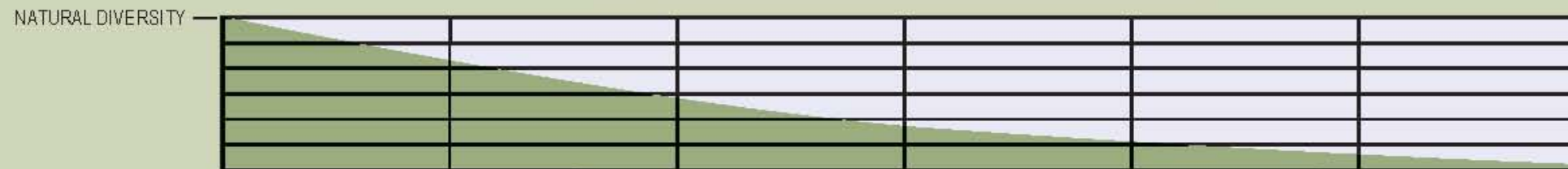
SOCIAL ELEMENTS LESS DENSITY	MORE DENSITY.....	PRIVATE	
	..... PRIMARILY RESIDENTIAL	..... PRIMARILY MIXED USE
	..... SMALLER BUILDINGS	..... LARGER BUILDINGS
	..... MORE GREENSCAPE	..... MORE HARDSCAPE
	..... DETACHED BUILDINGS	..... ATTACHED BUILDINGS
	..... ROTATED FRONTAGES	..... ALIGNED FRONTAGES
	..... YARDS & PORCHES	..... STOOPS & SHOPFRONTS
	..... DEEP SETBACKS	..... SHALLOW SETBACKS
	..... ARTICULATED MASSING	..... SIMPLE MASSING
	..... WOODEN BUILDINGS	..... MASONRY BUILDINGS
	..... GENERALLY PITCHED ROOFS	..... GENERALLY FLAT ROOFS
	..... SMALL YARD SIGNS	..... BUILDING MOUNTED SIGNAGE
	..... LIVESTOCK	..... DOMESTIC ANIMALS
 ROADS & LANES STREETS & ALLEYS		PUBLIC
	..... NARROW PATHS	..... WIDE SIDEWALKS
	..... HIGH L.O.S. STANDARDS	..... LOW L.O.S. STANDARDS
	..... OPPORTUNISTIC PARKING	..... DEDICATED PARKING
	..... LARGER CURB RADII	..... SMALLER CURB RADII
..... OPEN SWALES	..... RAISED CURBS		
..... STARLIGHT	..... STREET LIGHTING	CIVIC	
..... MIXED TREE CLUSTERS	..... ALIGNED STREET TREES		
..... LOCAL GATHERING PLACES	..... REGIONAL INSTITUTIONS		
..... PARKS & GREENS	..... PLAZAS & SQUARES		

* The category of Natural Elements is derived

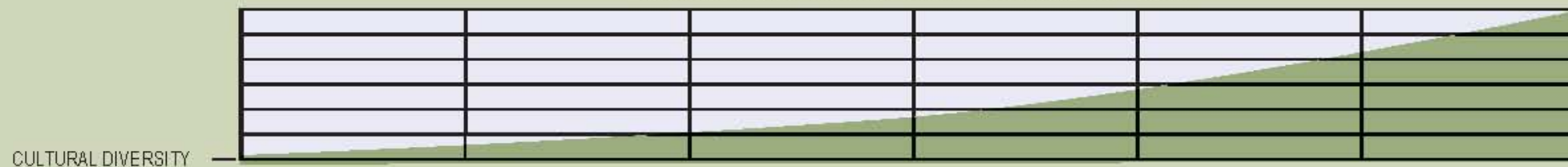
INDICES OF DIVERSITY



EXISTING ENVIRONMENTAL THEORY / ECOLOGICAL ANALYSIS



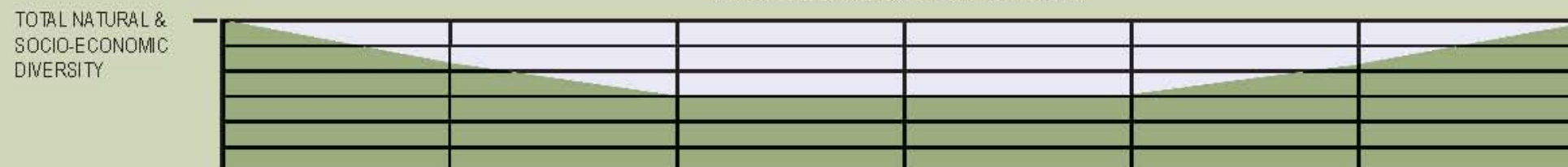
EXISTING URBAN THEORY / SOCIO-ECONOMIC ANALYSIS



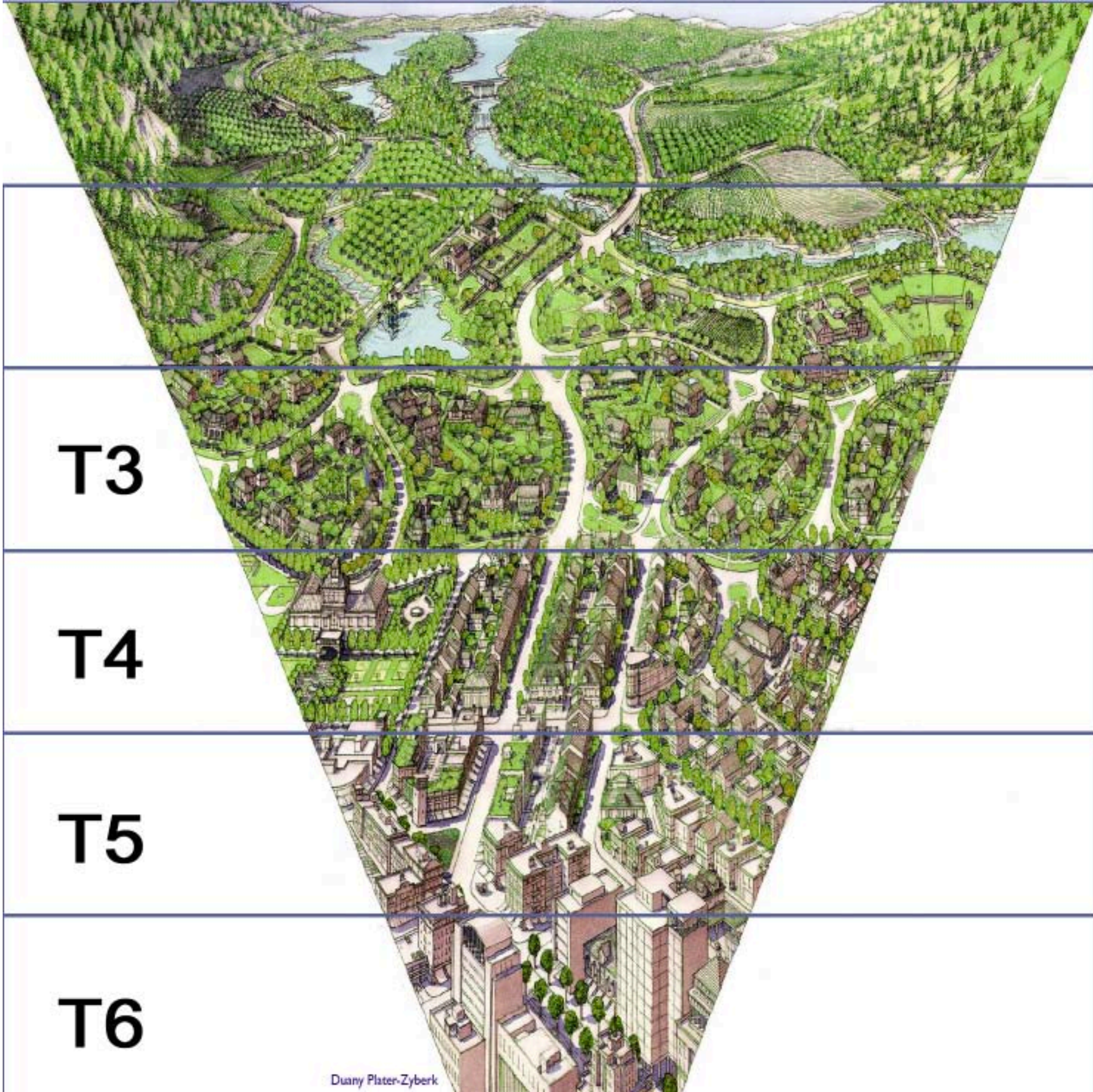
PROPOSED THEORY / INTEGRATED ANALYSIS



PROPOSED CULTURAL ADJUSTMENT



Indices of Diversity by Transect

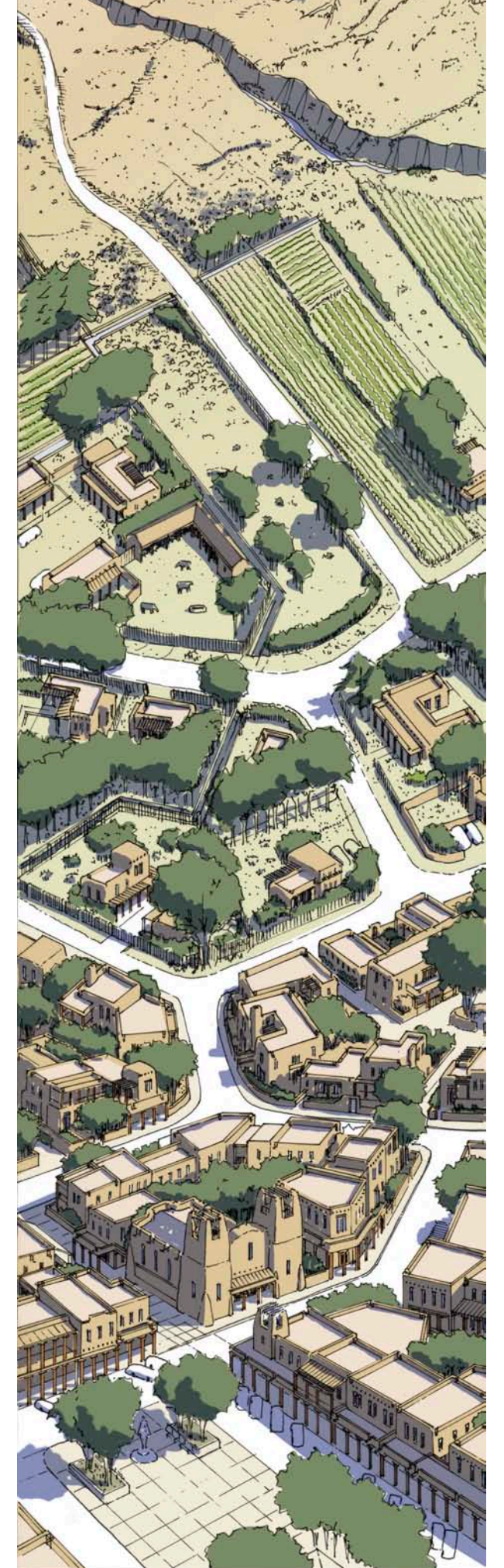
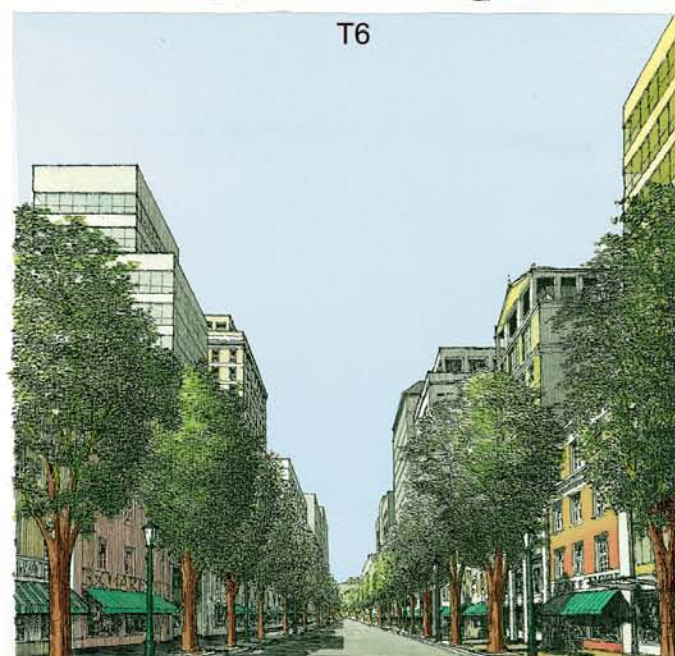
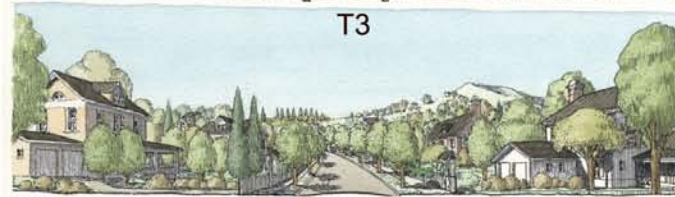
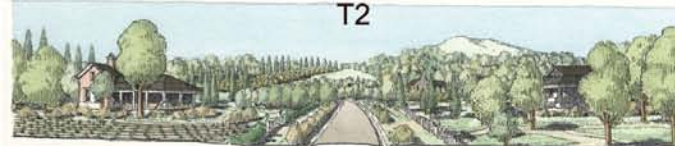
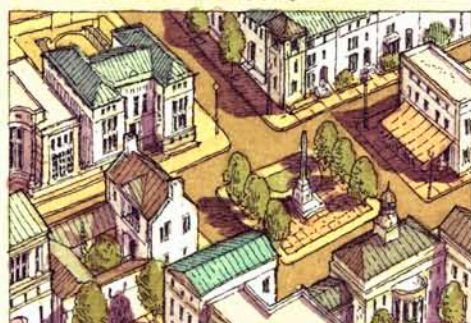
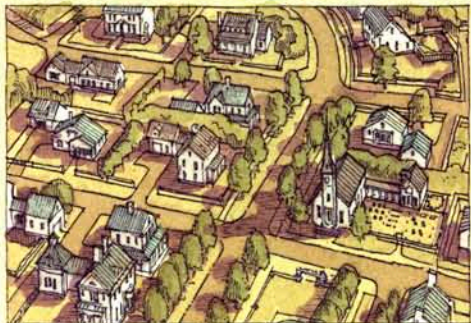
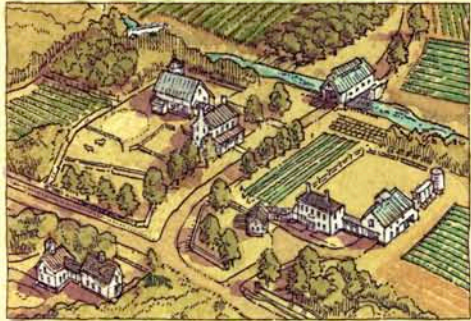
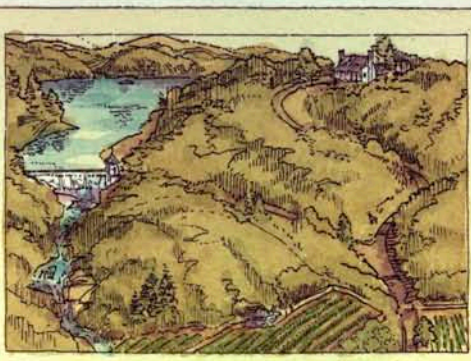


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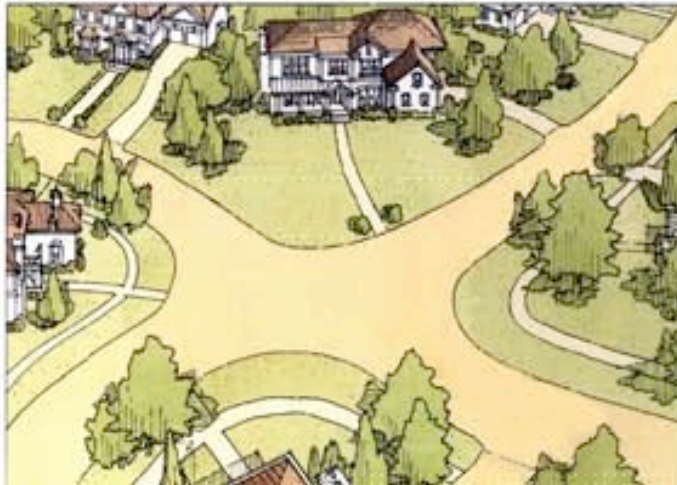
T4

T5

T6



T4 Sub-Urban



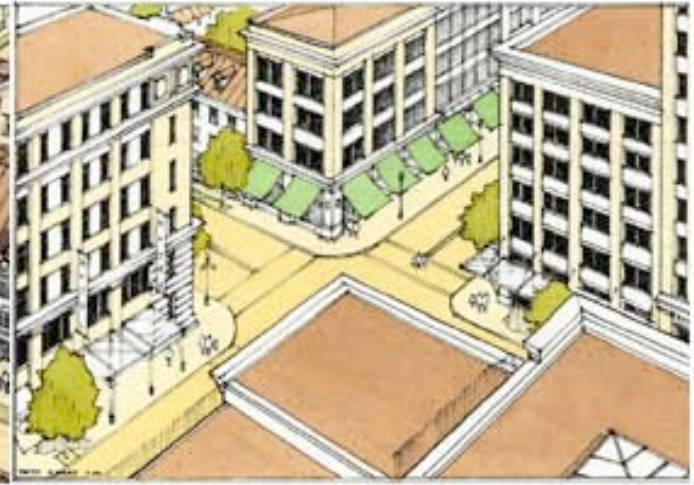
T4 General Urban



T5 Urban Center



T6 Urban Core



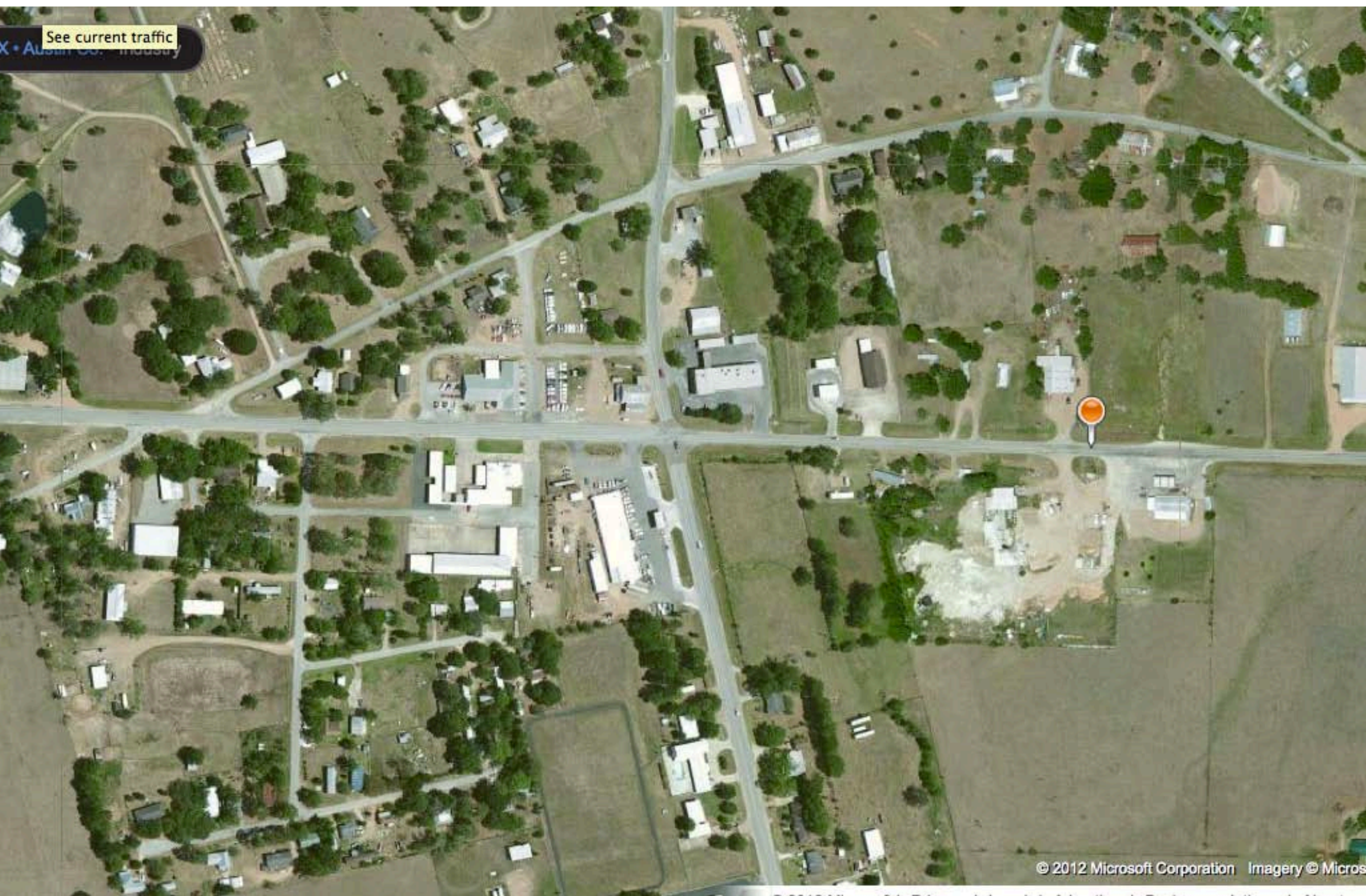








See current traffic
X • Austin Co. Industry



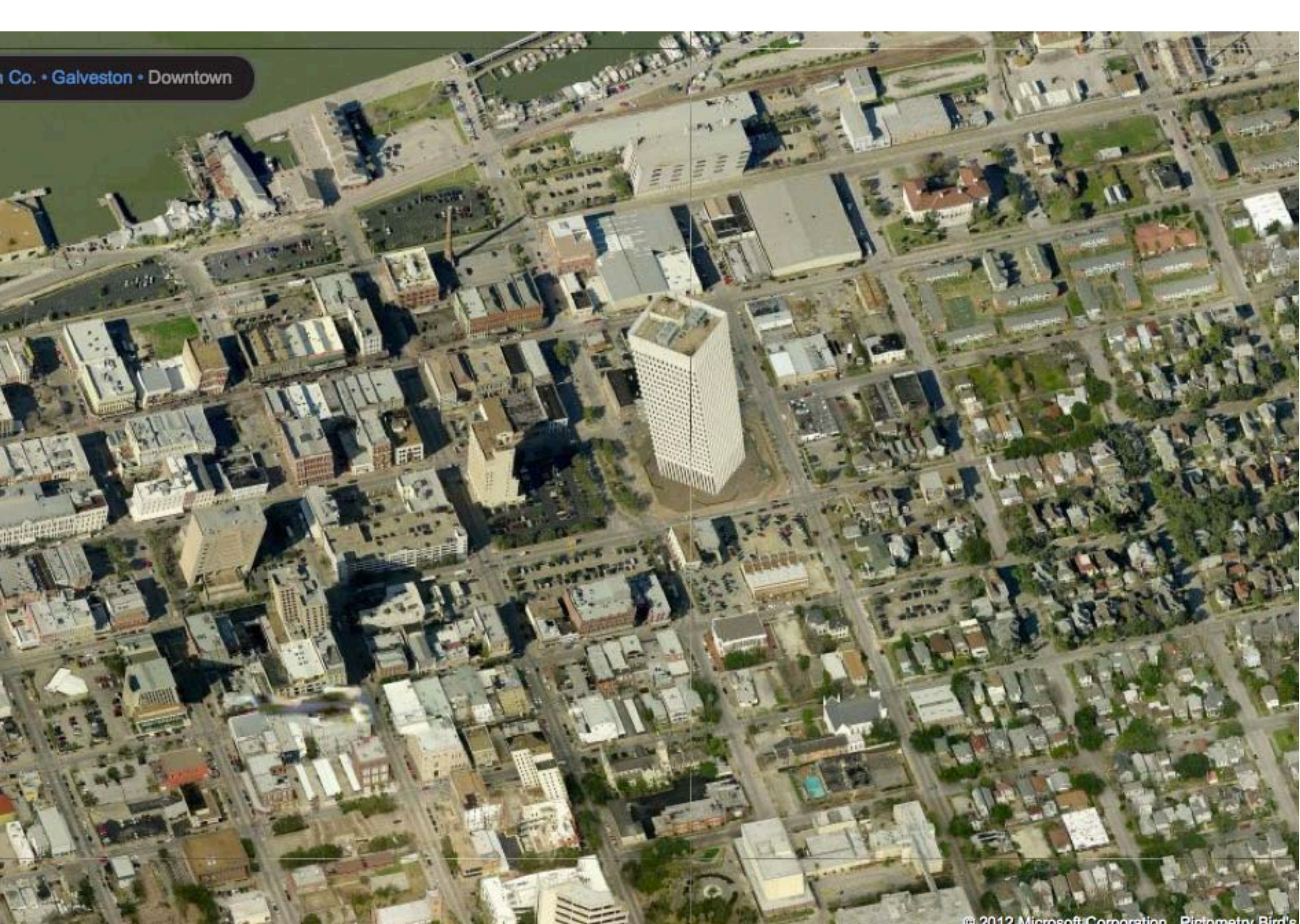
town

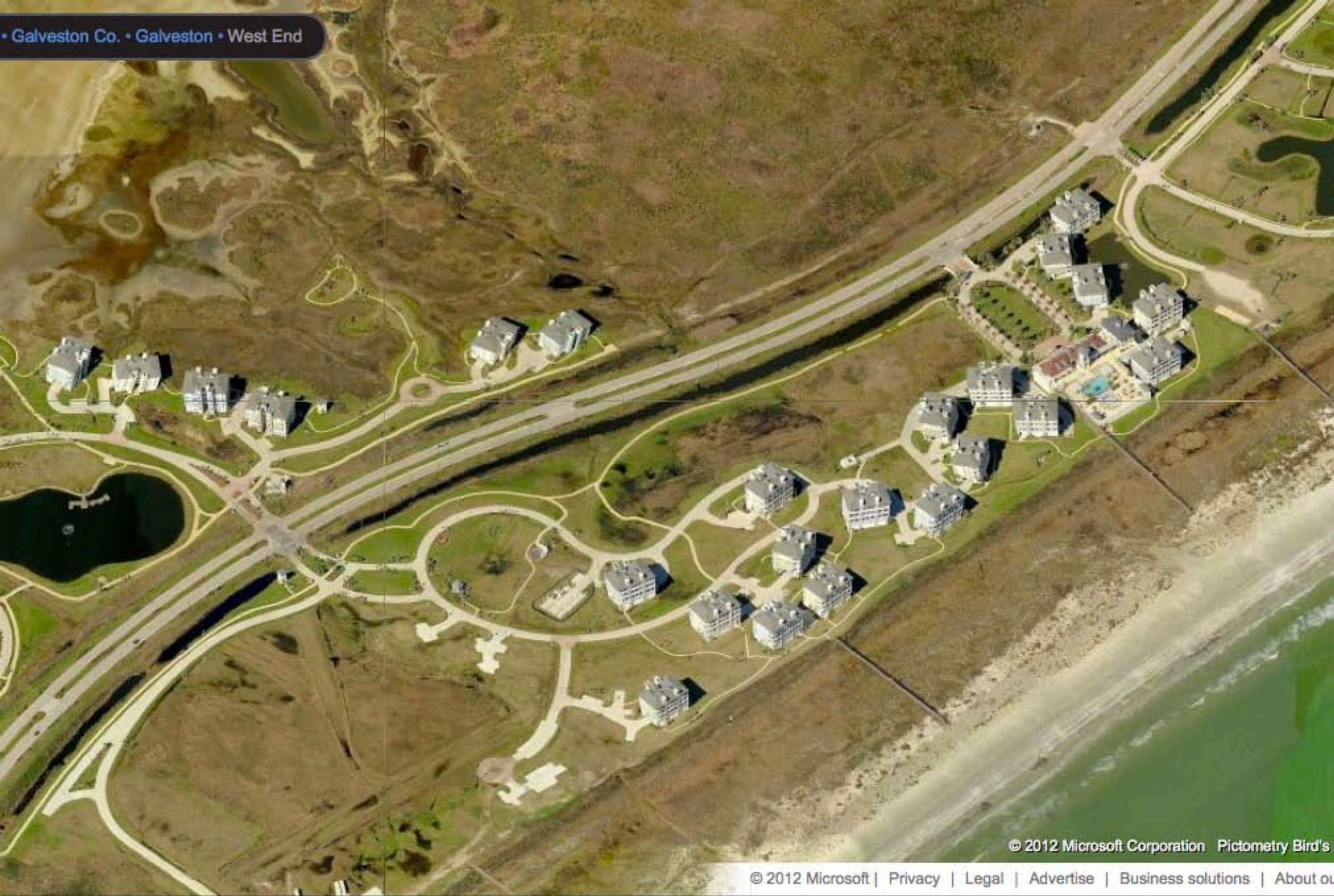


© 2012 Microsoft Corporation Pictometry Bird's Eye



250 feet



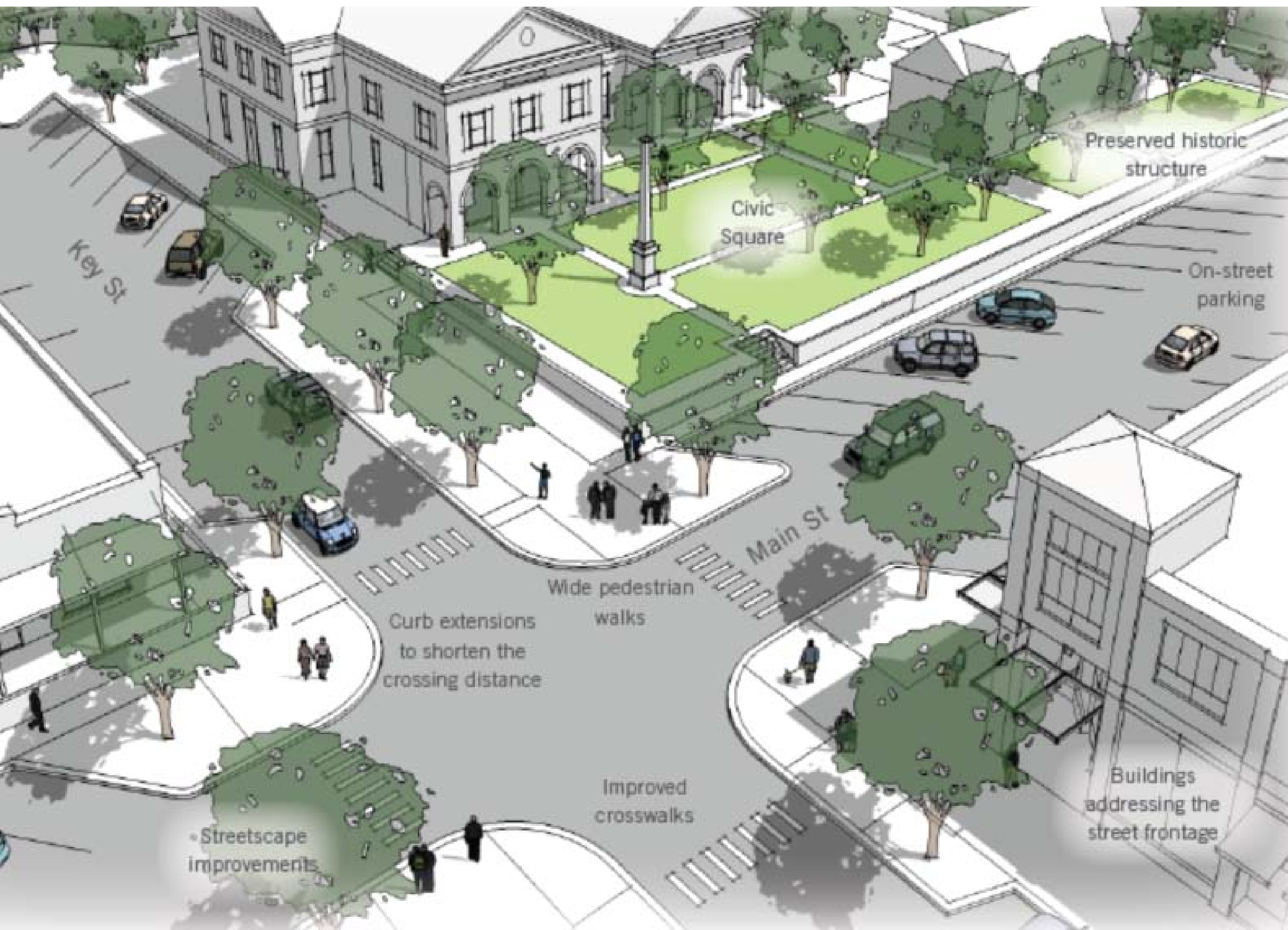




Downtown Waller now



Downtown Waller tomorrow



Preserved historic structure

Civic Square

On-street parking

Key St

Main St

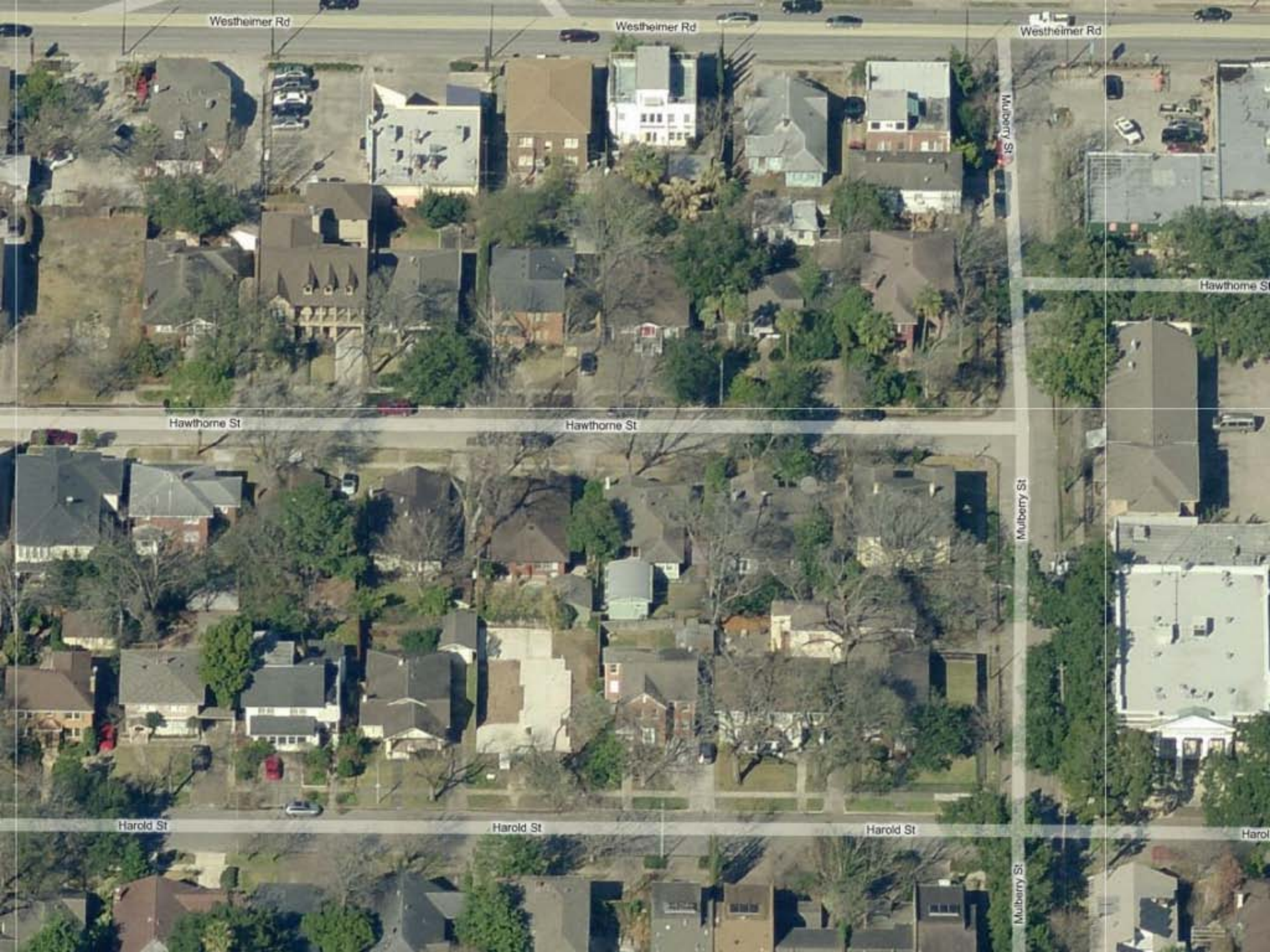
Wide pedestrian walks

Curb extensions to shorten the crossing distance

Improved crosswalks

Streetscape improvements

Buildings addressing the street frontage

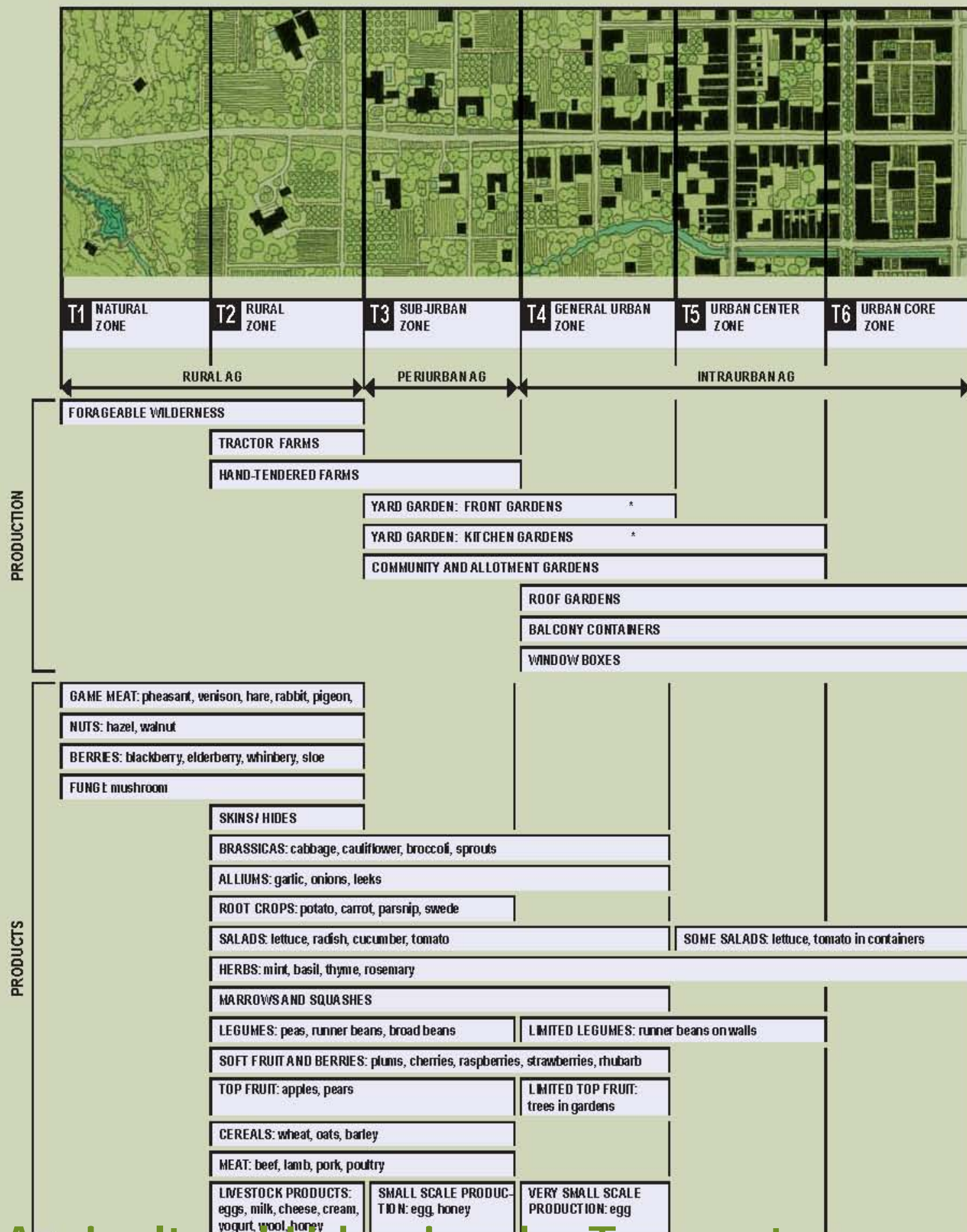




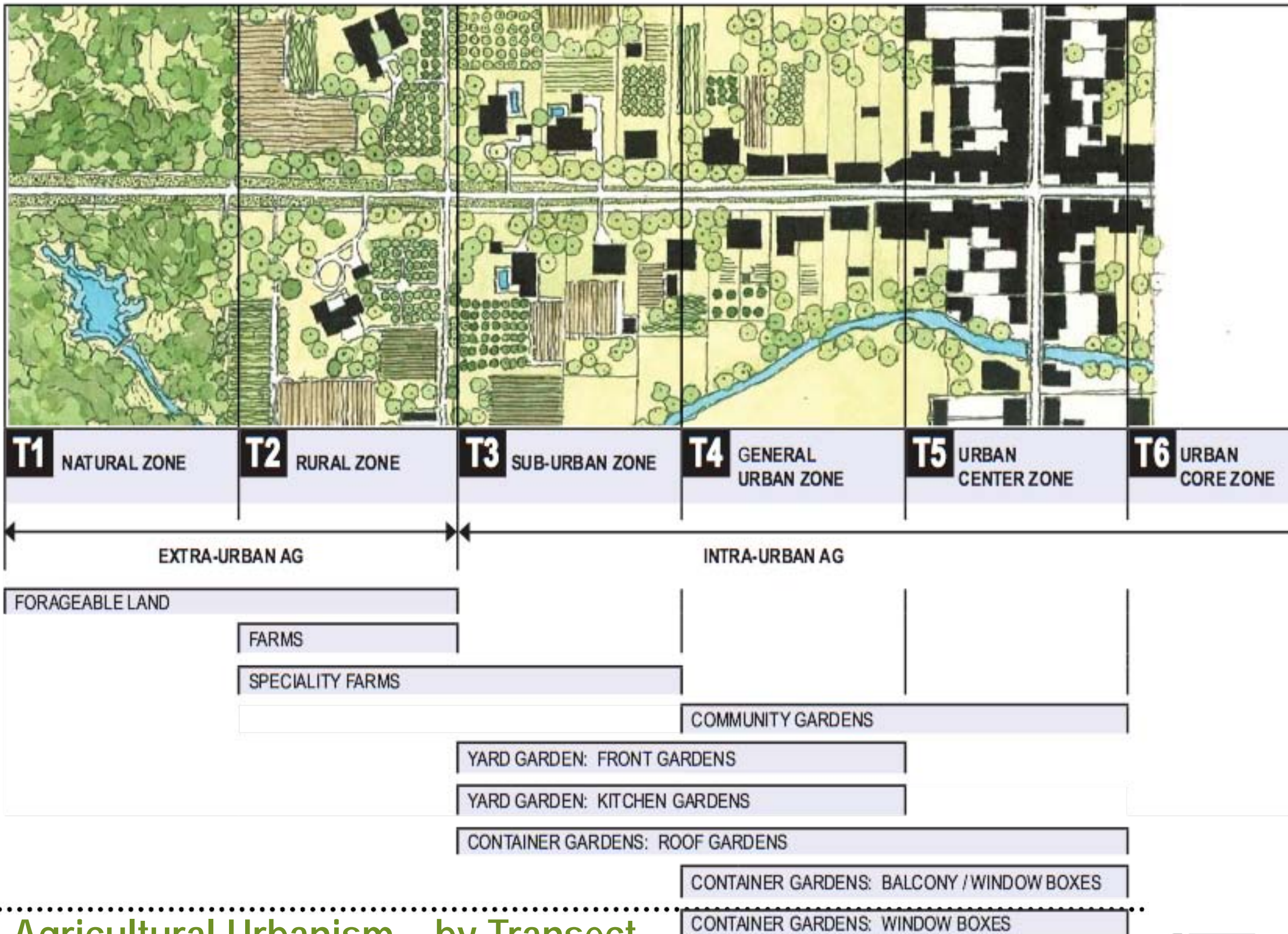
Food Production Along the Transect

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



* Allowed by Warrant



Agricultural Urbanism – by Transect

Farmer's Market

Processing Plant

*Window Boxes &
Vertical Gardens*

Kitchen Gardens

Large Gardens

Small Farms

Large Farms



Agricultural Urbanism Project - Hertfordshire, UK

Market Hall
Restaurant
Culinary Institute
Barnyard
Workers Housing
Dance Hall
University Research Barns
Value Added Agriculture
VAA Retail



Agricultural Urbanism Project – Southlands, B.C. Canada

