



CNU XVI
AUSTIN TEXAS

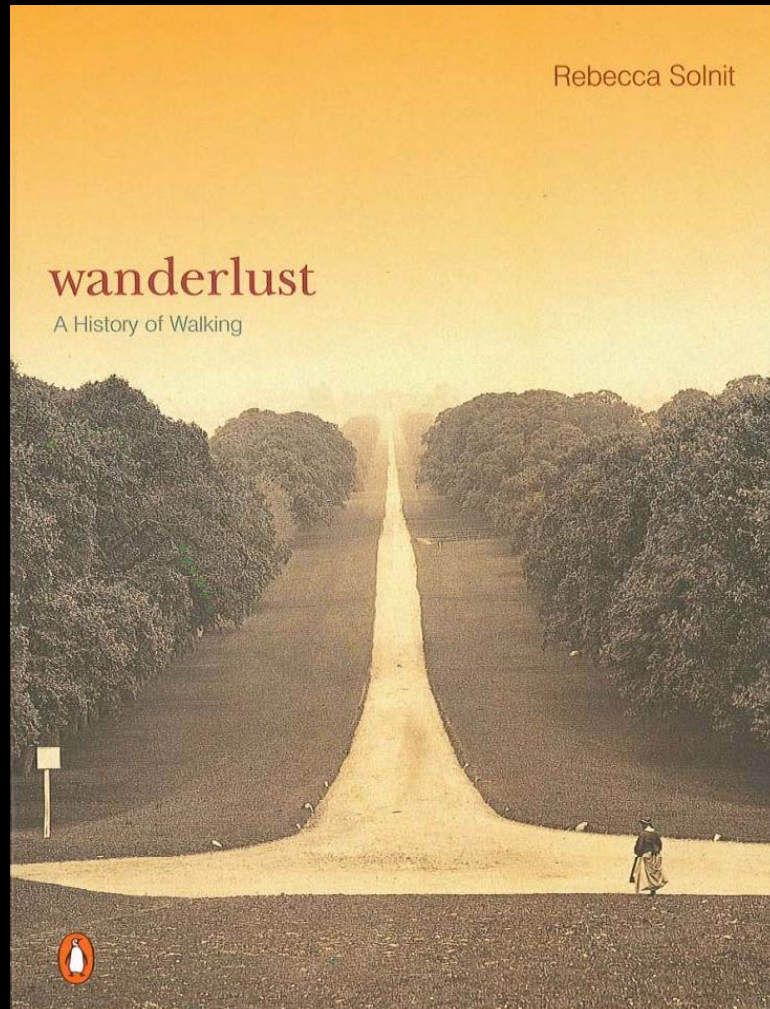
NEW URBANISM AND THE
BOOMING METROPOLIS
APRIL 3 THROUGH 6, 2008



Terri L. Musser, AICP
Charlier Associates, Inc.

MAKING ALL STREETS MORE PEDESTRIAN ORIENTED





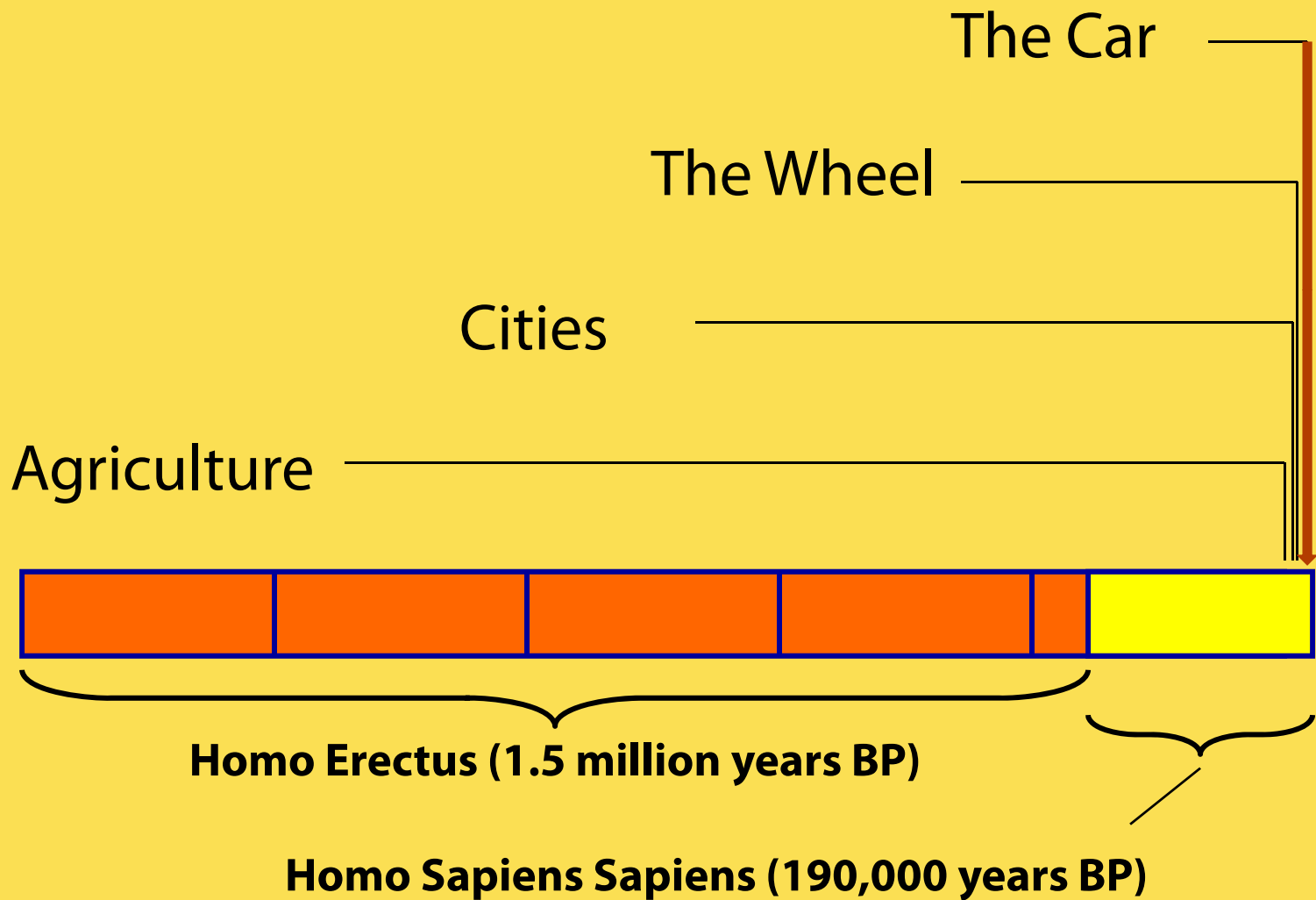
The Pace of Thoughts



Human History



Human History





Moms Become Cab Drivers

Everything is a Drive Away

Suburban mothers spend
17 full days a year
behind the wheel, more than the
average parent spends dressing,
bathing and feeding a child

Source: Surface Transportation Policy Project

Home

Recreation

Workplace

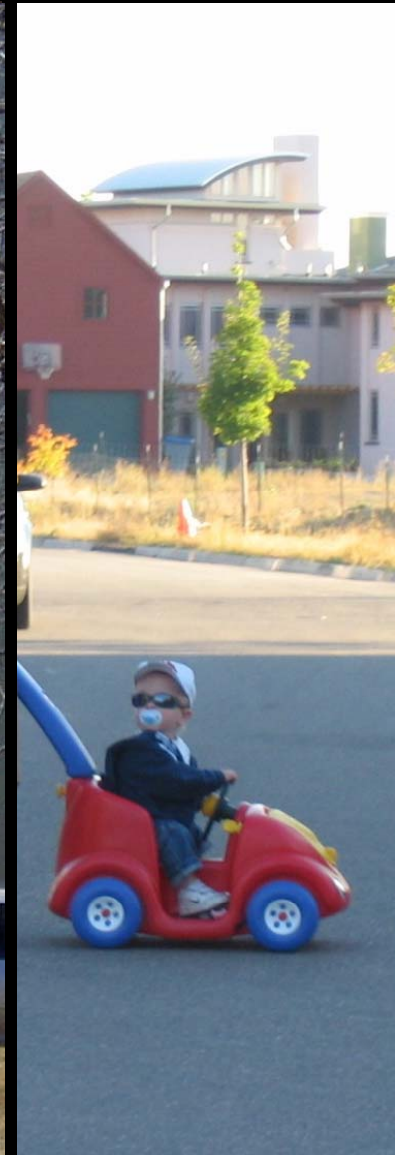




Life at > 35 mph



Life at < 3.5 mph



Life at < 3.5 mph

“Communities should be designed for the **pedestrian**....

8. The physical organization of the region should be supported by a framework of transportation alternatives. Transit, **pedestrian**, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile.

12. Many activities of daily living should occur within **walking** distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage **walking**, reduce the number and length of automobile trips, and conserve energy.

15. Appropriate building densities and land uses should be within **walking** distance of transit stops, permitting public transit to be come a viable alternative to the automobile.

16. Schools should be sized and located to enable children to **walk** or bicycle to them.

23. Streets and squares should be safe, comfortable, and interesting to the **pedestrian**. Properly configured, they encourage **walking** and enable neighbors to know each other and protect their communities.”

- CHARTER OF THE NEW URBANISM

How do we effectively address walking?

Reasons **why** people walk
Environments **where** people walk
Relationships across the **Transect**

Types of Walking

- Utilitarian Walking
- Rambling
- Strolling, Lingerling
- Promenading
- Special Events

Utilitarian Walking



Redmond, WA

Rambling



Wichita, KS

Strolling, Lingerin



Boulder, CO

Promenading



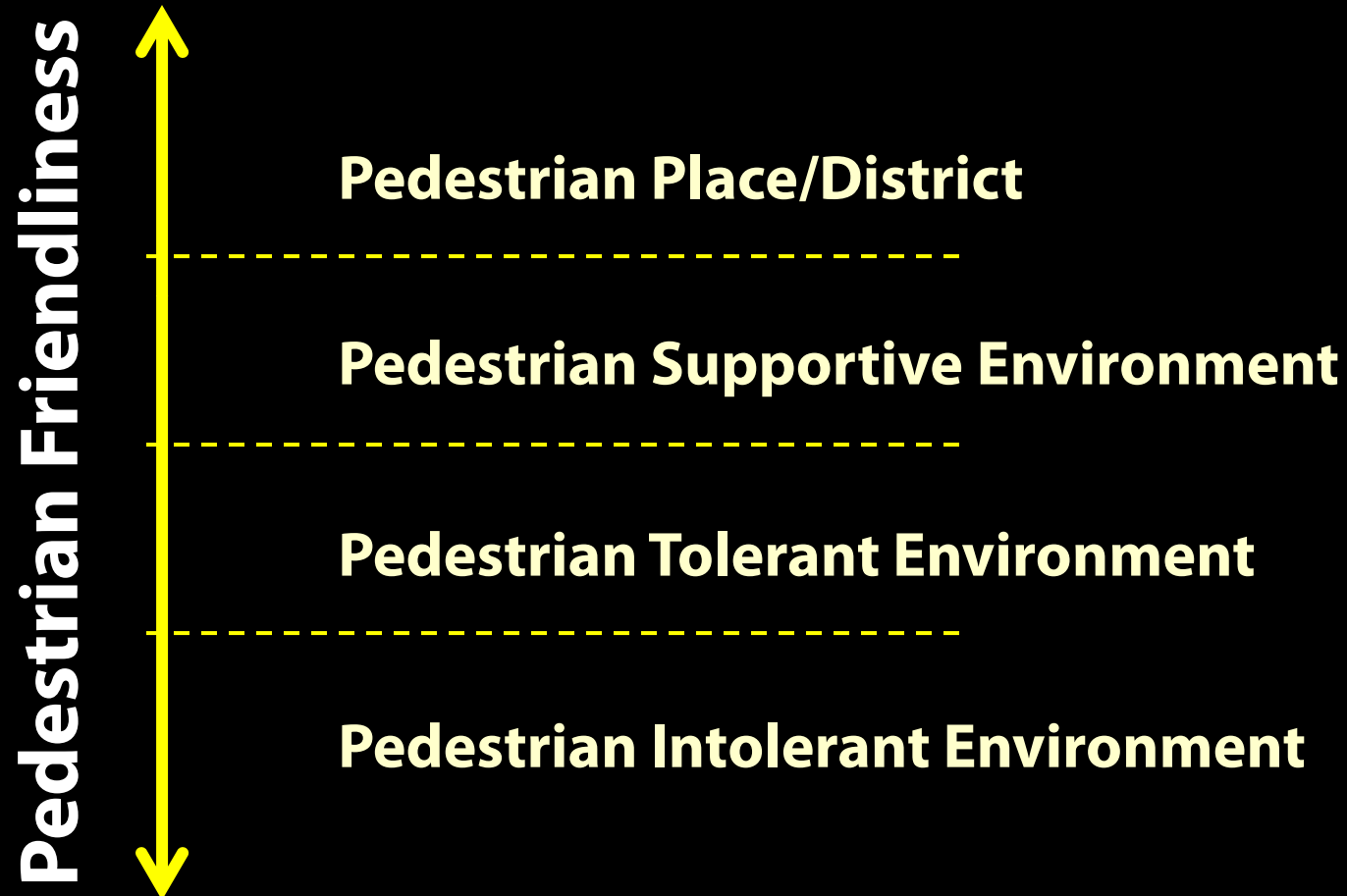
Boulder

Special Events



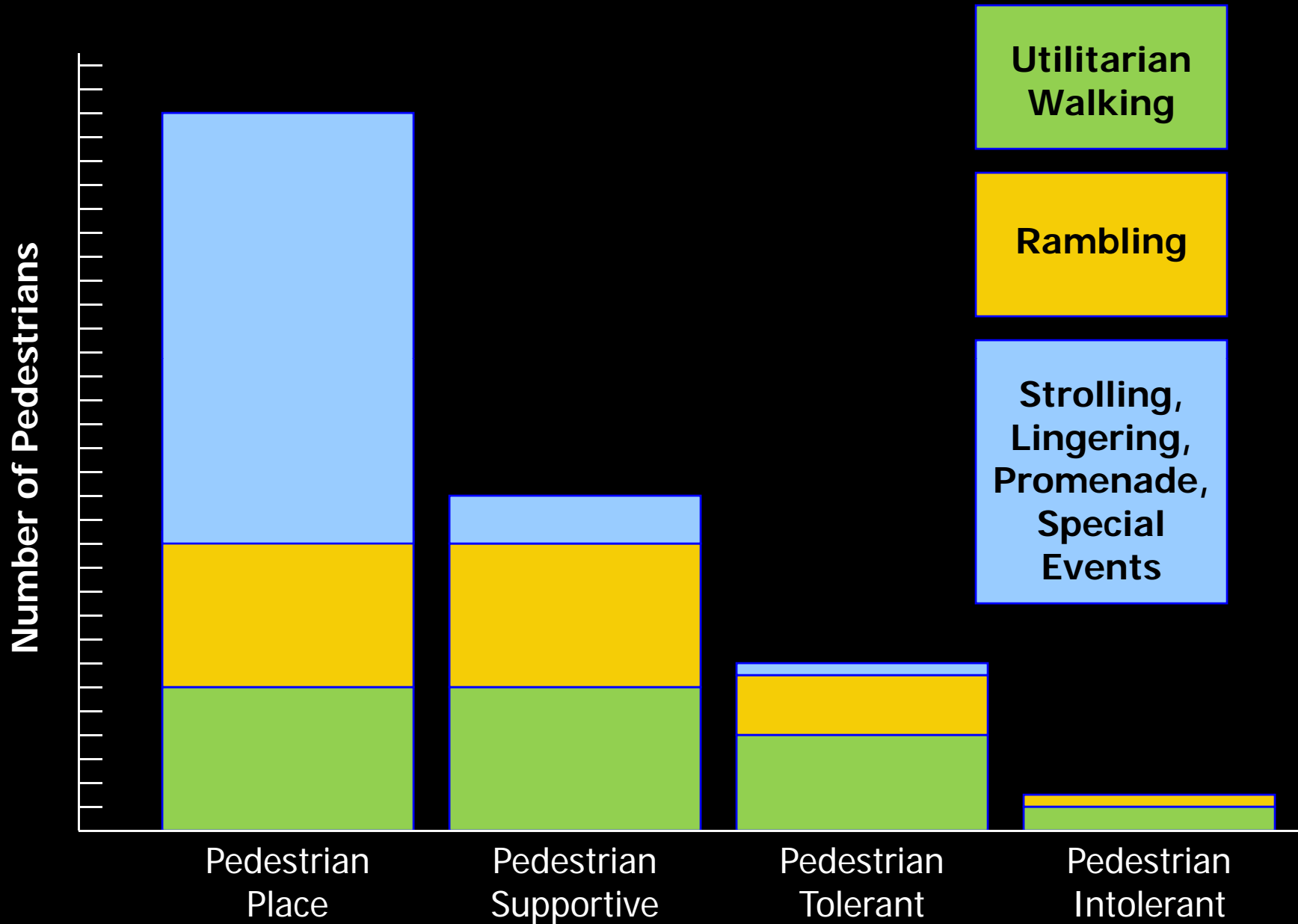
Boulder

Types of Pedestrian Environments



“Pedestrian Science”

Walk Environments and Types of Walking





Hierarchy of Pedestrian Environments



Legend

Centers

LOS Standard: Pedestrian Supportive
Design Standard: Pedestrian Supportive & Pedestrian Place



Multimodal Corridors

LOS Standard (Mixed Use and Commercial) Areas: Pedestrian Supportive
LOS Standard (Other Areas): Pedestrian Tolerant

Design Standard: Pedestrian Supportive



Other Areas in Redmond

LOS Standard: Pedestrian Tolerant

Design Standard: Pedestrian Supportive



Figure: 5A.7

The map depicts the vision for existing vertical levels of pedestrian friendliness throughout the City of Redmond. All areas that are currently 'Pedestrian Tolerant' will become 'Pedestrian Supportive'. Areas 1/4 mile from key destinations, identified multimodal corridors, and resource centers shall be built to a higher standard of Pedestrian Supportive design. Three distinct 'places' shall be created as pedestrian precincts with primary functions designed around pedestrian activity.

Transportation Master Plan Redmond, WA



Pedestrian Intolerant



Pedestrian Tolerant



Pedestrian Supportive

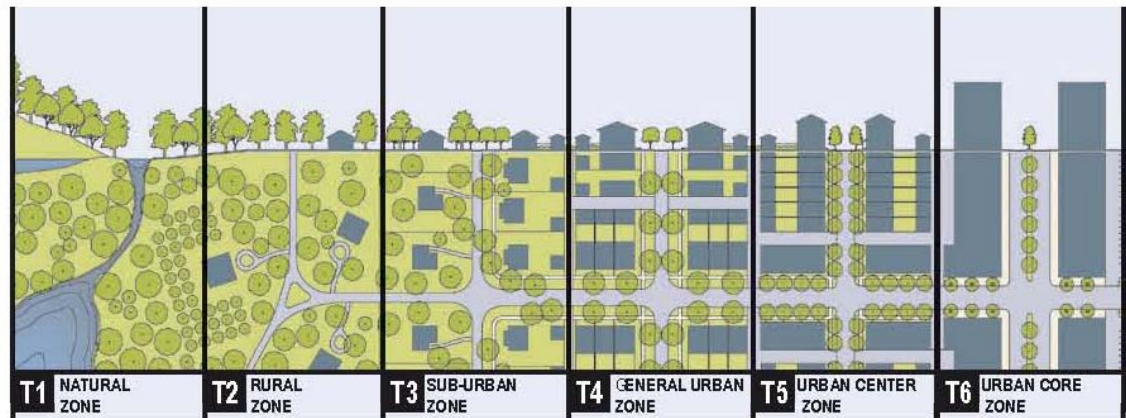


Pedestrian Place

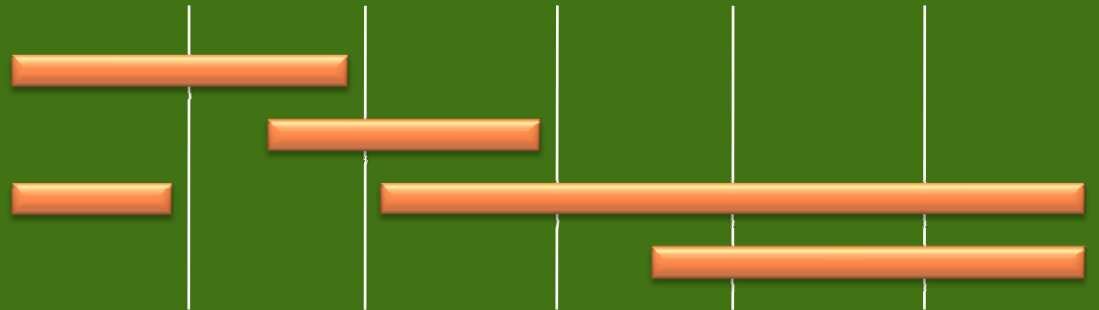
2 Pedestrian Realm

	Physical Characteristics			
Sidewalk Presence	<ul style="list-style-type: none"> Local streets have no sidewalks. Arterial streets have sidewalks on only one side of street. 	<ul style="list-style-type: none"> Local streets have sidewalks on only one side of street. Arterial streets have sidewalks on both sides. 	<ul style="list-style-type: none"> All streets have sidewalks provided on both sides 	<ul style="list-style-type: none"> All streets have sidewalks provided on both sides with supplemental traffic-calming measures
Sidewalk Location and Width	<ul style="list-style-type: none"> Sidewalks lacking, or provided immediately back of curb. Walkway width < 5' 	<ul style="list-style-type: none"> Sidewalks provided immediately back of curb. Walkway width 5' min. 	<ul style="list-style-type: none"> Walkway separated from vehicular traffic by a 5' sidewalk planting strip. Sidewalk 6'-8' wide to accommodate passing and pairs of pedestrians walking side by side. Next to transit stops, sidewalks are 10' wide and extend to street at boarding spot. 	<ul style="list-style-type: none"> The pedestrian realm includes a sidewalk planting strip/pedestrian furnishings zone next to street, a walk/talk zone, and a shy zone next to buildings. Through walkway space 8'-10' wide; overall sidewalk width 10'-30' to provide space for pedestrian amenities.
Sidewalk Planting Strip	None.	None.	5' minimum, ideally with overstory street trees 20'-30' on center, with clear sight distance triangles at intersections and crossings.	5' - 10' with overstory street trees in parkway planting strips, or none if tree wells and supplemental planters are provided within wide sidewalks, with clear sight distance triangles.
Transit Stops	No furniture groupings provided.	Benches provided at transit stops.	Shelters, benches and trash receptacles provided at transit stops.	Transit stops and amenities are integral in the design of pedestrian places.
Pedestrian Furnishings	None.	No furnishings along streets not on transit routes.	Pedestrian furniture groupings located intermittently along non-transit streets. Pedestrian wayfinding provided.	Pedestrian furniture groupings, sculpture, drinking fountains, decorative fountains, wayfinding, etc. are located throughout.
Lighting	None.	High angle highway lamps, such as cobra heads.	Commercial districts have both: <ul style="list-style-type: none"> High angle lamps. Additional low angle street lamps for improved lighting at ground level. 	Pedestrian places have: <ul style="list-style-type: none"> Overall street lighting. Low placement of tungsten lamps. Additional light emitted from stores

Types of Pedestrian Environments



Pedestrian **I**ntolerant
Pedestrian **T**olerant
Pedestrian **S**upportive
Pedestrian **P**lace



Pedestrian Intolerant

- Any land use
- Very little if any walking
- Motor vehicles dominate
- Unsafe, unpleasant

.... not a place I want to be

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1



T2

T3

T4

T5

T6



Maui, Hawaii

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Boulder County

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

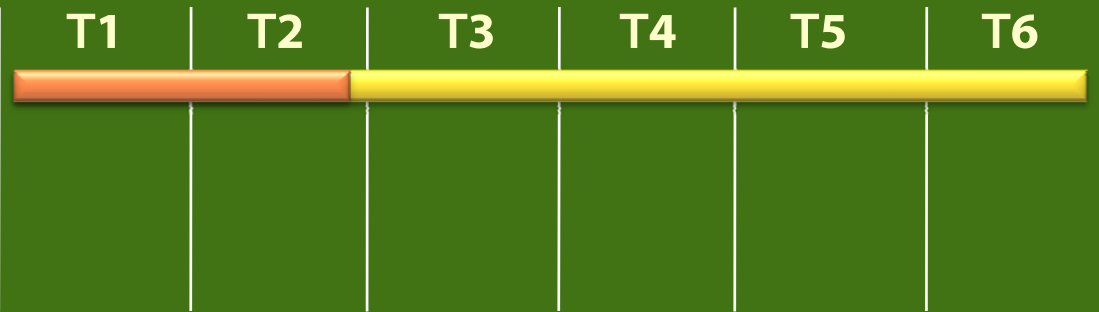
T5

T6



Minneapolis

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**



La Crosse, WI

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Philadelphia, PA

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Hawaii Island

Pedestrian Tolerant

- All land uses except freeway and limited special uses (airport runway, garbage dump, etc.)
- Utilitarian walking and rambling only
- Motor vehicles are present and tend to dominate
- Minimal levels of accommodation

... I don't really feel like I belong here

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Flagstaff, AZ

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Nashville, TN

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Redmond, WA

Pedestrian **Intolerant**
Pedestrian **Tolerant**
Pedestrian **Supportive**
Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Kapalua, Maui

Pedestrian Supportive

- Commercial, recreational, institutional or residential setting – most but not all land uses
- May include gathering PLACES
- Pedestrians present at busy times
- Motor vehicles can be present, but may not dominate

.... an 8-year old could be independently mobile

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**

T1

T2

T3

T4

T5

T6



Austin, TX

T1

T2

T3

T4

T5

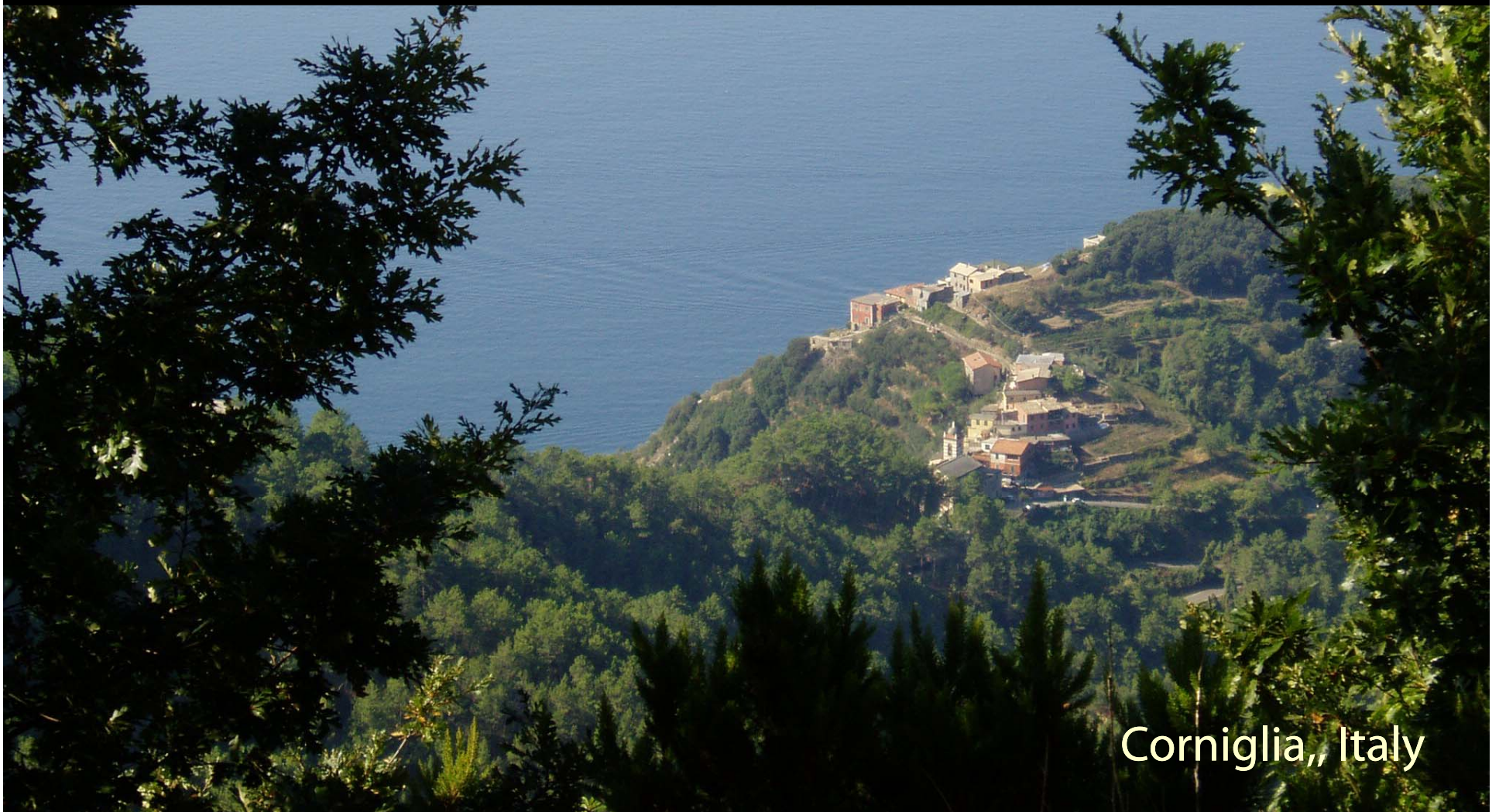
T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



Corniglia, Italy

T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



Stapleton-Denver, CO

Pedestrian Place

- Commercial, recreational or institutional setting (not residential)
- Gathering place – identifiable as a PLACE
- Significant pedestrian presence
- Motor vehicles can be present, but may not dominate
- Substantial supportive transportation systems required (parking, transit, bike)
.... where you take out-of-town visitors

T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



Winter Park, FL

T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



Honolulu, Waikiki

T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

Pedestrian **Tolerant**

Pedestrian **Supportive**

Pedestrian **Place**



Brighton, England

T1

T2

T3

T4

T5

T6

Pedestrian **Intolerant**

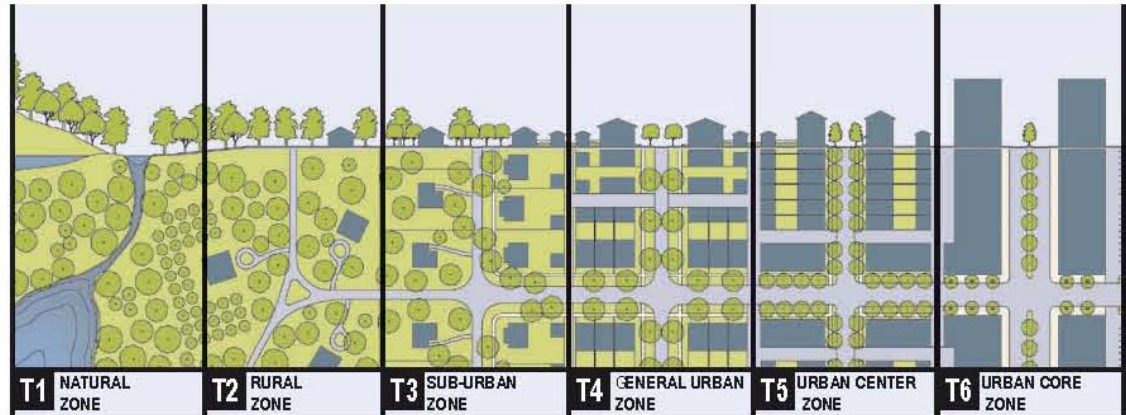
Pedestrian **Tolerant**

Pedestrian **Supportive**

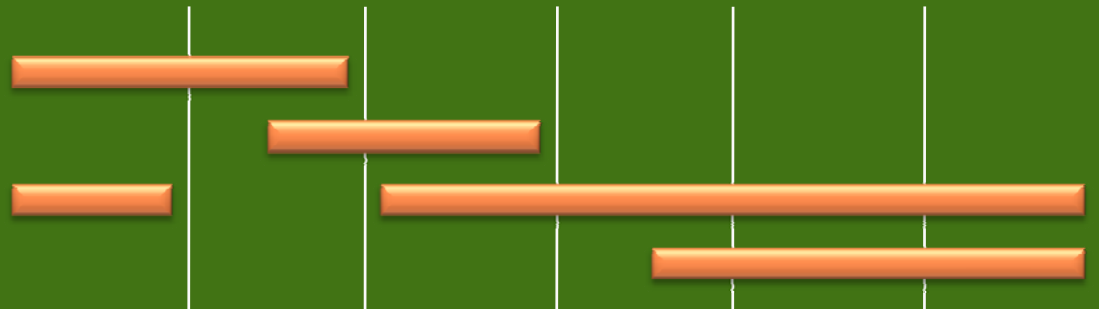
Pedestrian **Place**

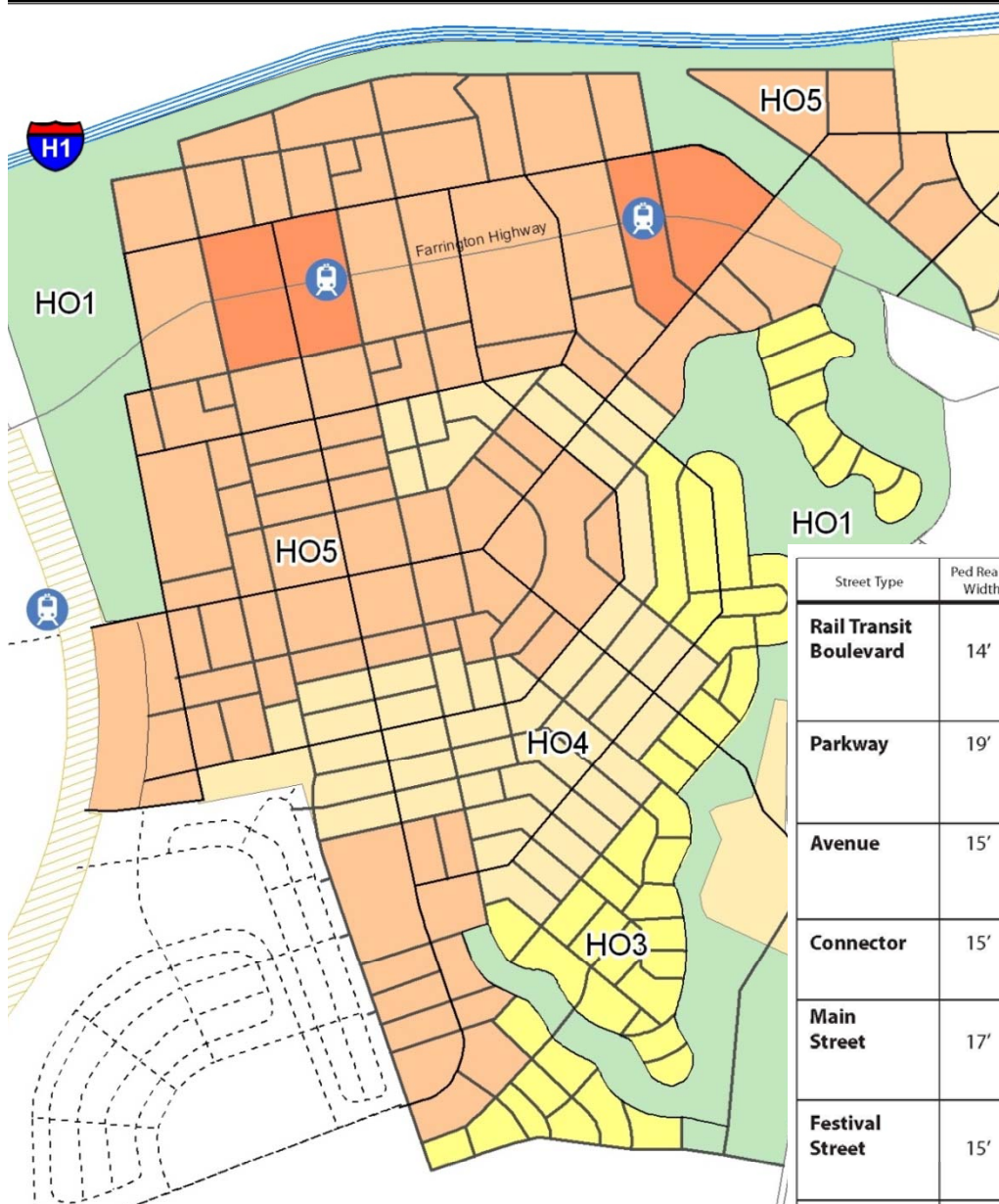


Boulder






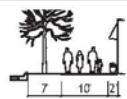




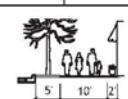

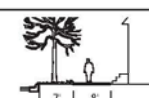




Pedestrian **I**ntolerant
 Pedestrian **T**olerant
 Pedestrian **S**upportive
 Pedestrian **P**lace



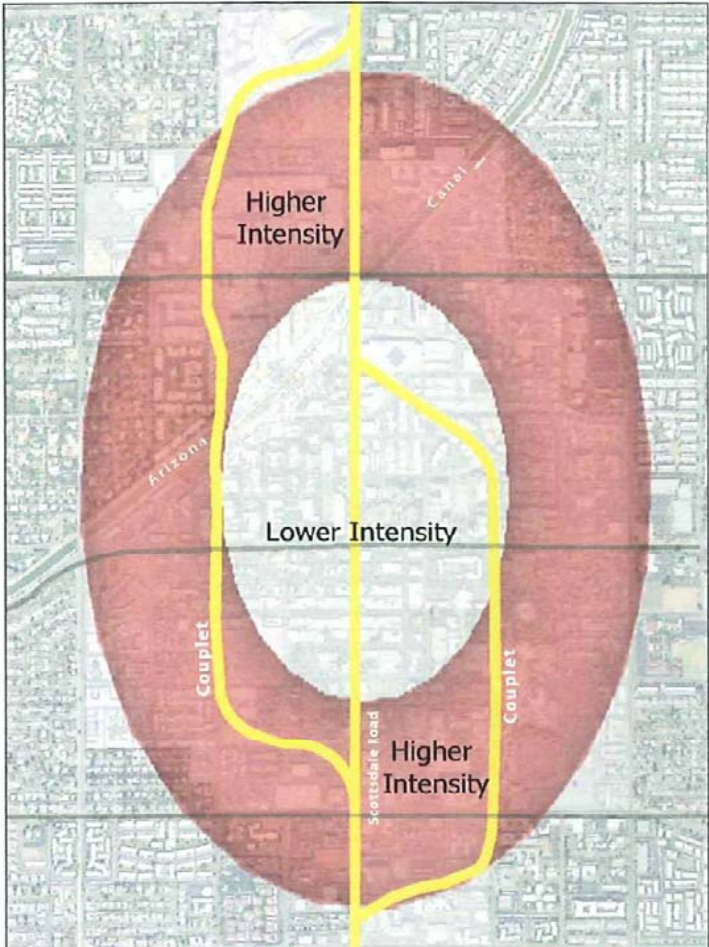
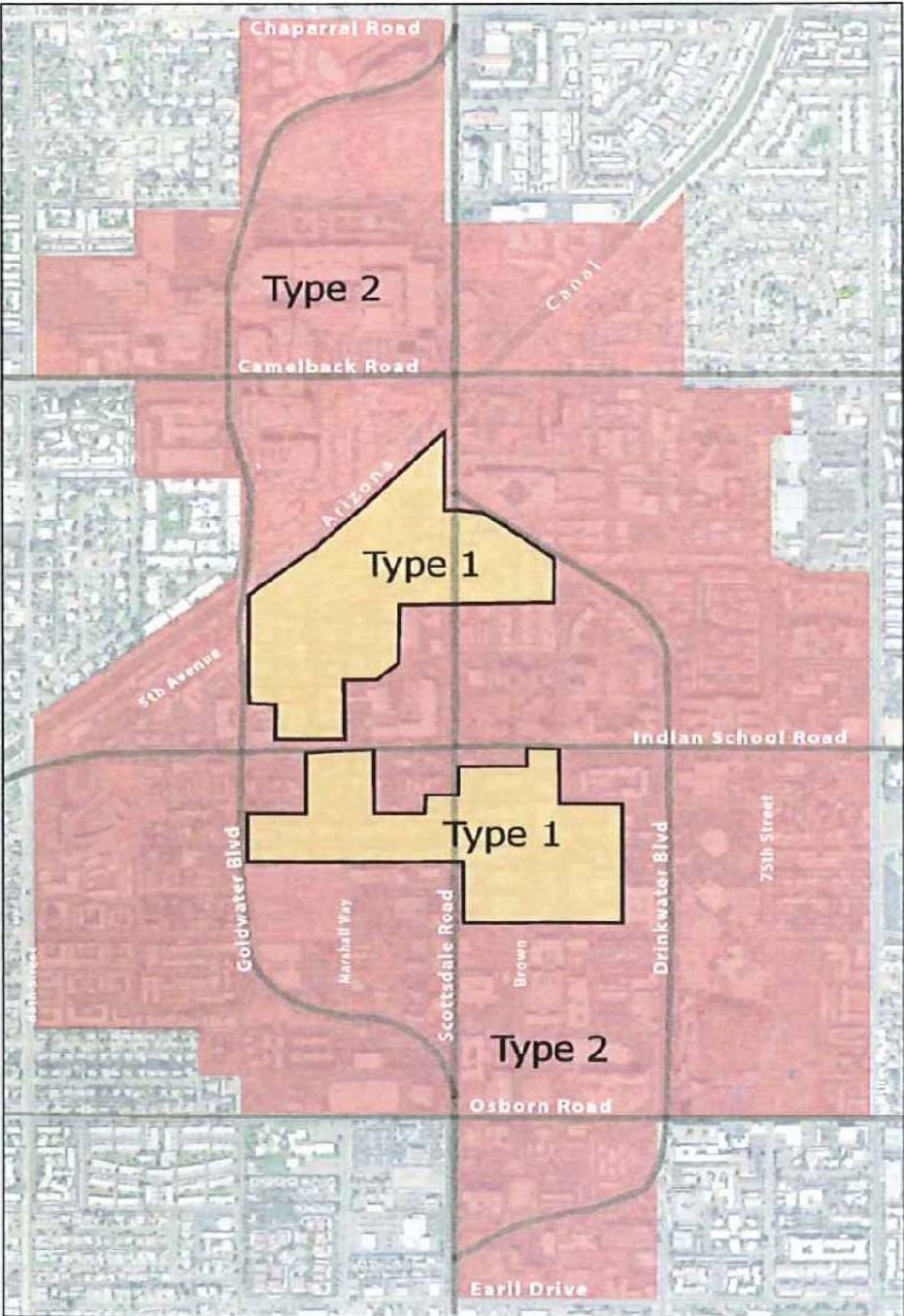


Ho'opili Master Plan

East Kapolei, Oahu, HI

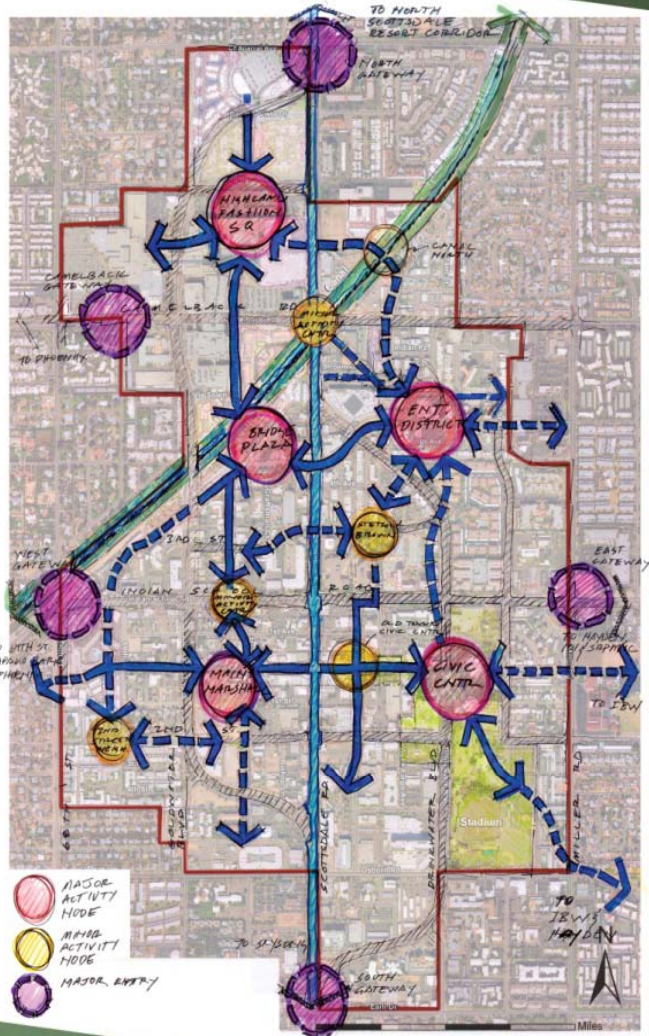
Street Type	Ped Realm Width	HO3	HO4	HO5	HO6
Rail Transit Boulevard	14'	N/A		 *Part of the sidewalk may need to be on private property to provide 12 feet min. of space	N/A
Parkway	19'	N/A			N/A
Avenue	15'	 Residential	 Commercial		
Connector	15'	N/A	N/A	N/A	N/A
Main Street	17'	N/A		N/A	N/A
Festival Street	15'				N/A
Street	13'	N/A	N/A		N/A
Yield Street	13'	 Residential	 Commercial	N/A	N/A

Downtown Plan Update Scottsdale, AZ



CIRCULATION & CONNECTIVITY

DRAFT Downtown Pedestrian Framework



Downtown Plan Update

Scottsdale, AZ



LESSONS LEARNED

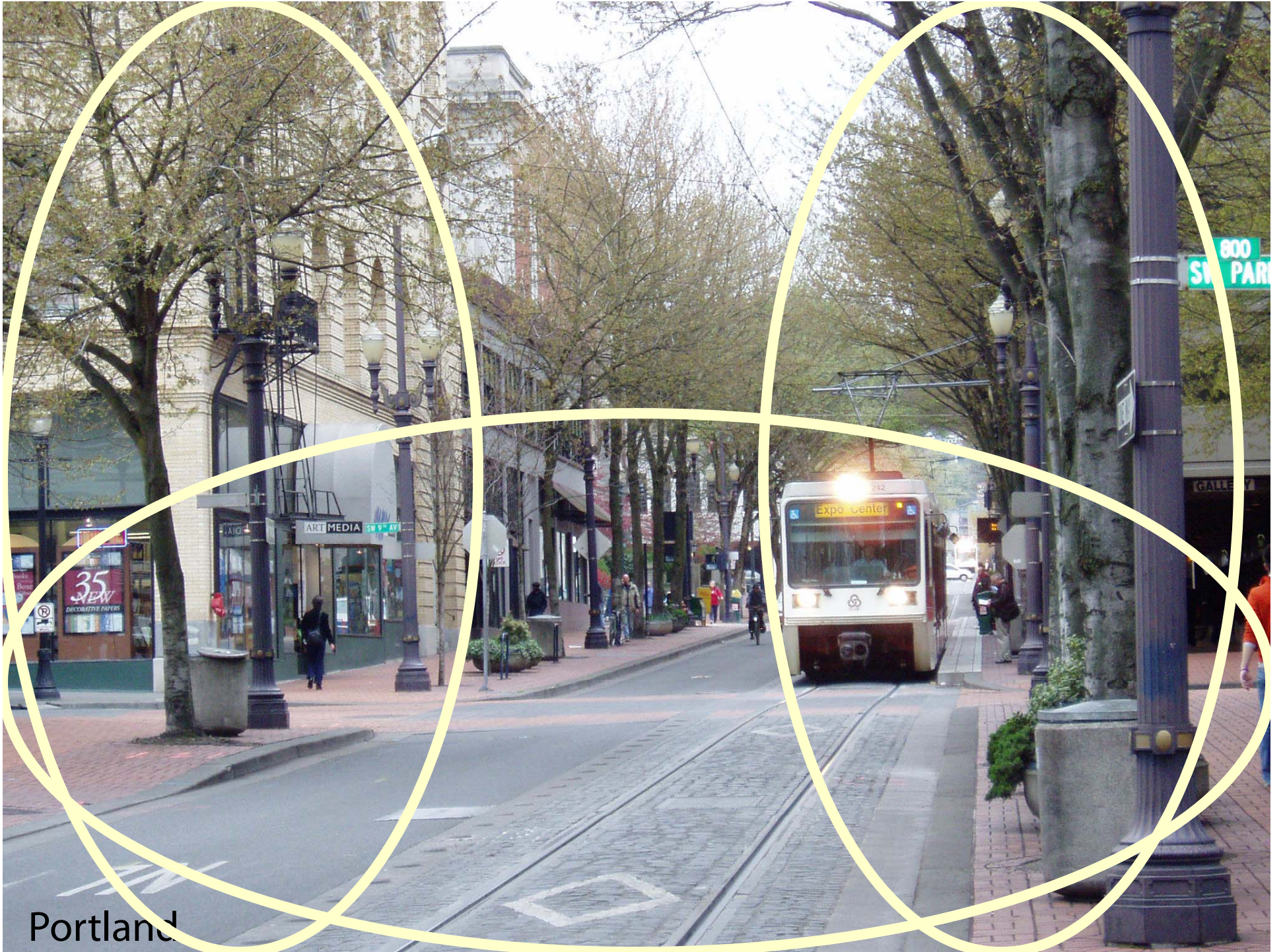
Great Streets relate to their places

Lakewood, CO



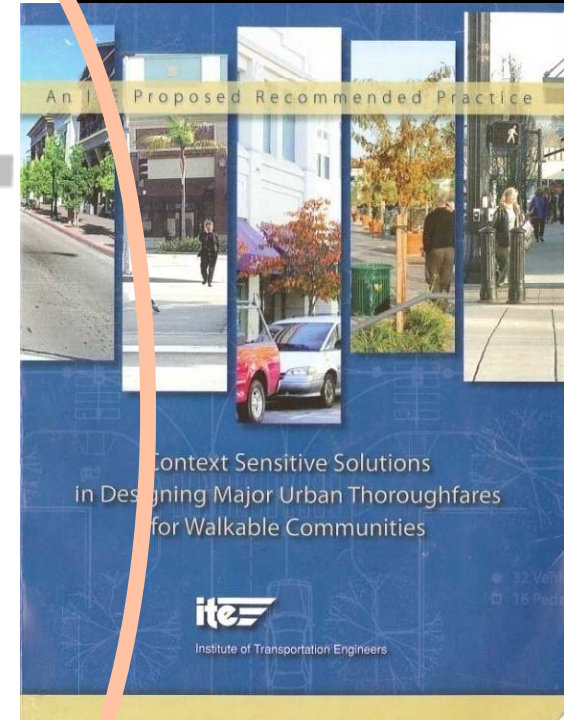
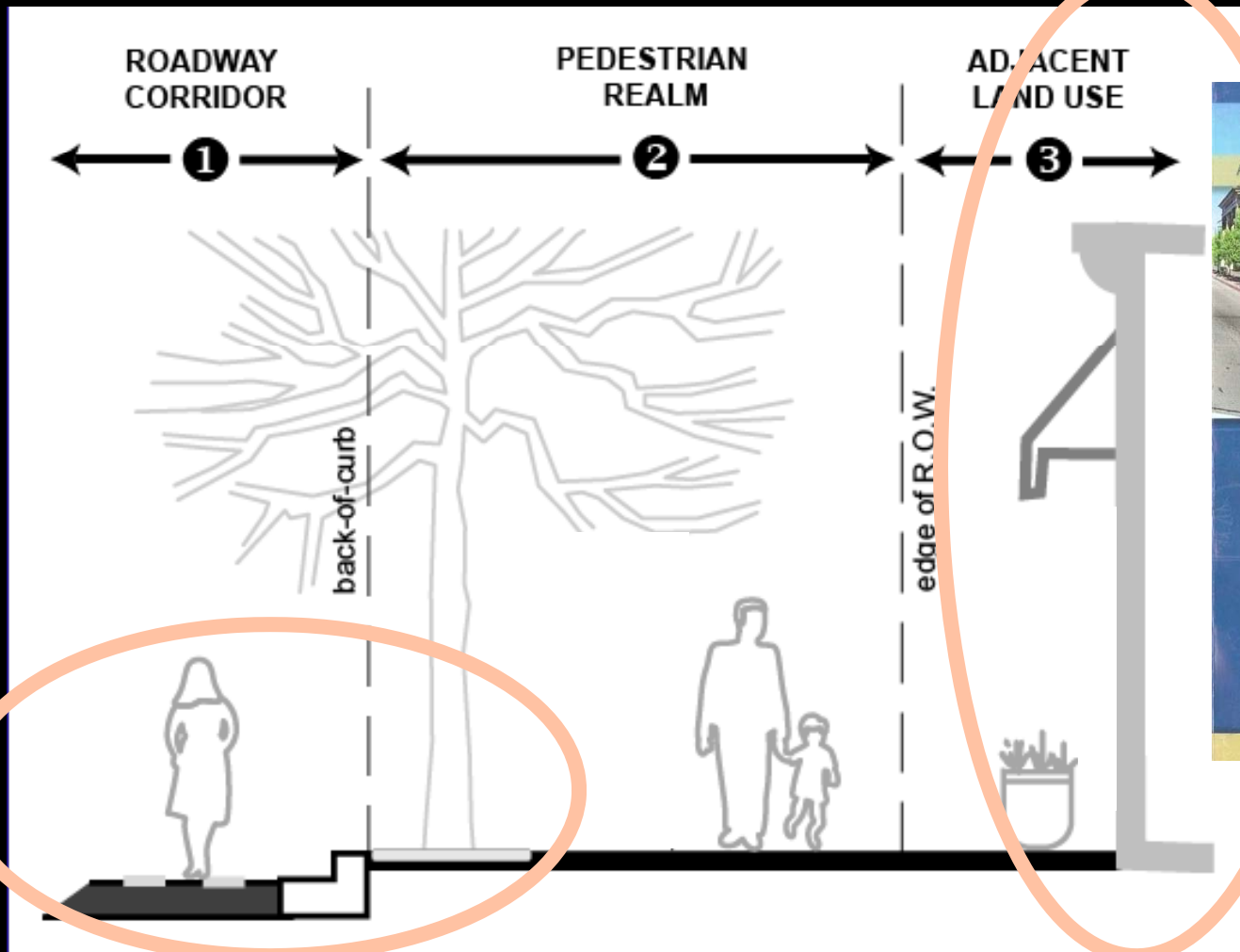


Boulder



Portland

Components of Pedestrian Environments



Traveled Way

Roadside

Context

First Floor Land Use



Grassy Planting Strip

Residential Frontages



Paving with Tree Wells

Commercial Frontages

Frontage Types SmartCode

	SECTION	PLAN
	LOT PRIVATE FRONTAGE	R.O.W. PUBLIC FRONTAGE
<p>a. Common Yard: a planted Frontage wherein the Facade is set back substantially from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The deep Setback provides a buffer from the higher speed Thoroughfares.</p>		 T2 T3
<p>b. Porch & Fence: a planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence at the Frontage Line maintains street spatial definition. Porches shall be no less than 8 feet deep.</p>		 T3 T4
<p>c. Terrace or Lightwell: a Frontage wherein the Facade is set back from the Frontage line by an elevated terrace or a sunken Lightwell. This type buffers Residential use from urban Sidewalks and removes the private yard from public Encroachment. Terraces are suitable for conversion to outdoor cafes. Syn: Dooryard.</p>		 T4 T5
<p>d. Forecourt: a Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back. The Forecourt created is suitable for vehicular drop-offs. This type should be allocated in conjunction with other Frontage types. Large trees within the Forecourts may overhang the Sidewalks.</p>		 T4 T5 T6
<p>e. Stoop: a Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing. This type is recommended for ground-floor Residential use.</p>		 T4 T5 T6
<p>f. Shopfront: a Frontage wherein the Facade is aligned close to the Frontage Line with the building entrance at Sidewalk grade. This type is conventional for Retail use. It has a substantial glazing on the Sidewalk level and an awning that should overlap the Sidewalk to within 2 feet of the Curb. Syn: Retail Frontage.</p>		 T4 T5 T6
<p>g. Gallery: a Frontage wherein the Facade is aligned close to the Frontage line with an attached cantilevered shed or a lightweight colonnade overlapping the Sidewalk. This type is conventional for Retail use. The Gallery shall be no less than 10 feet wide and should overlap the Sidewalk to within 2 feet of the Curb.</p>		 T4 T5 T6
<p>h. Arcade: a colonnade supporting habitable space that overlaps the Sidewalk, while the Facade at Sidewalk level remains at or behind the Frontage Line. This type is conventional for Retail use. The Arcade shall be no less than 12 feet wide and should overlap the Sidewalk to within 2 feet of the Curb. See Table 8.</p>		 T5 T6



Residential Frontages

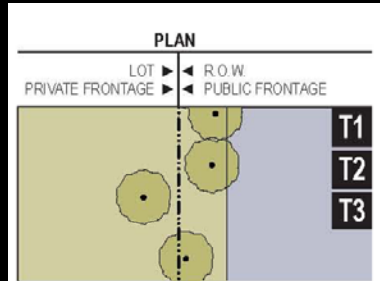


Commercial Frontages

Public Frontages

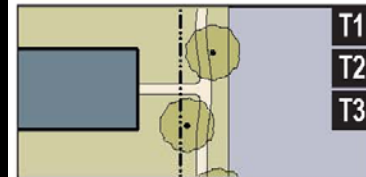
Thoroughfare Assemblies SmartCode

Highway



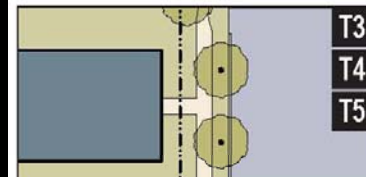
T1
T2
T3

Road



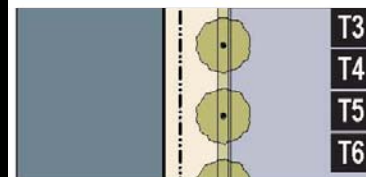
T1
T2
T3

Street



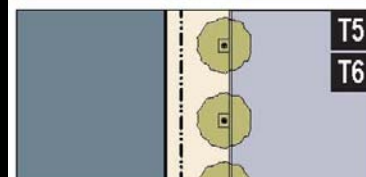
T3
T4
T5

Avenue



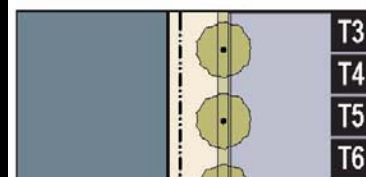
T3
T4
T5
T6

Commercial
Street



T5
T6

Boulevard

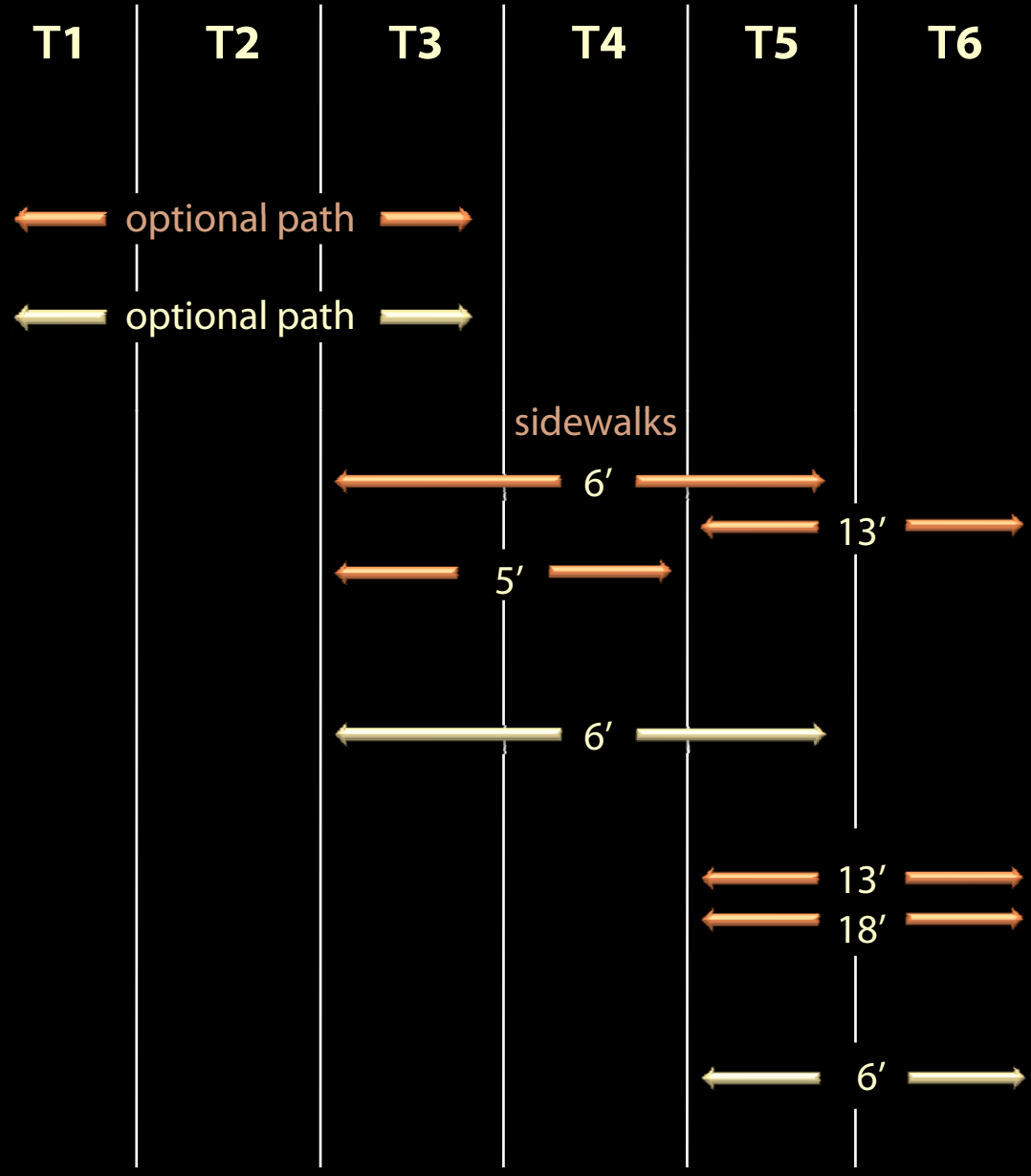
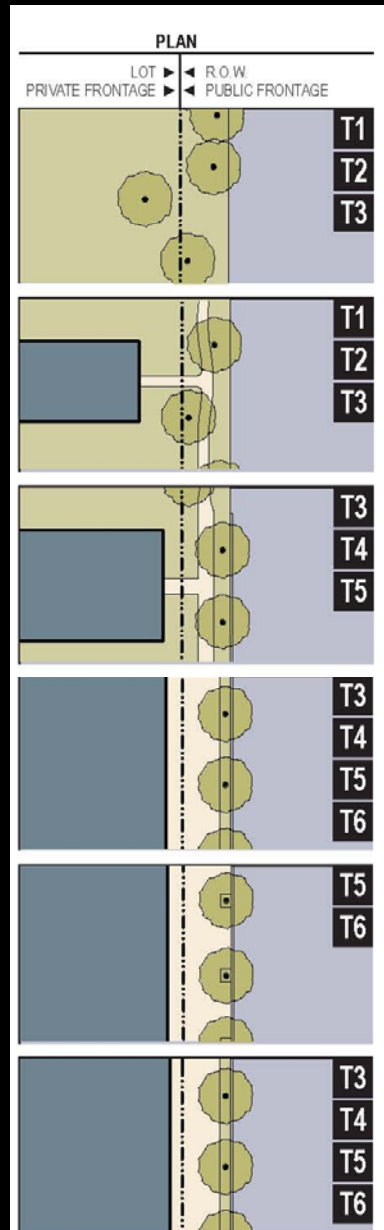


T3
T4
T5
T6

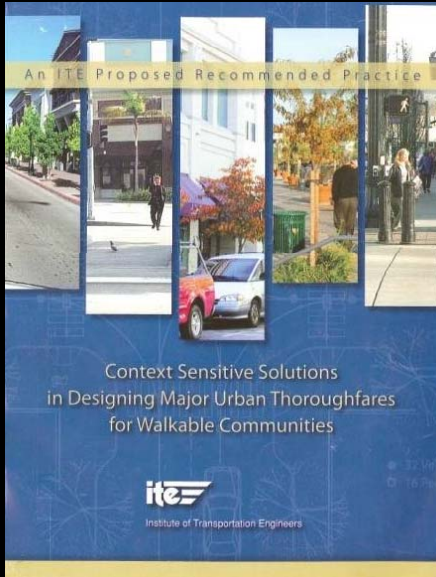


Commercial First Floor Uses

SmartCode Pedestrian Facilities



ITE/CNU Pedestrian Facilities



Street

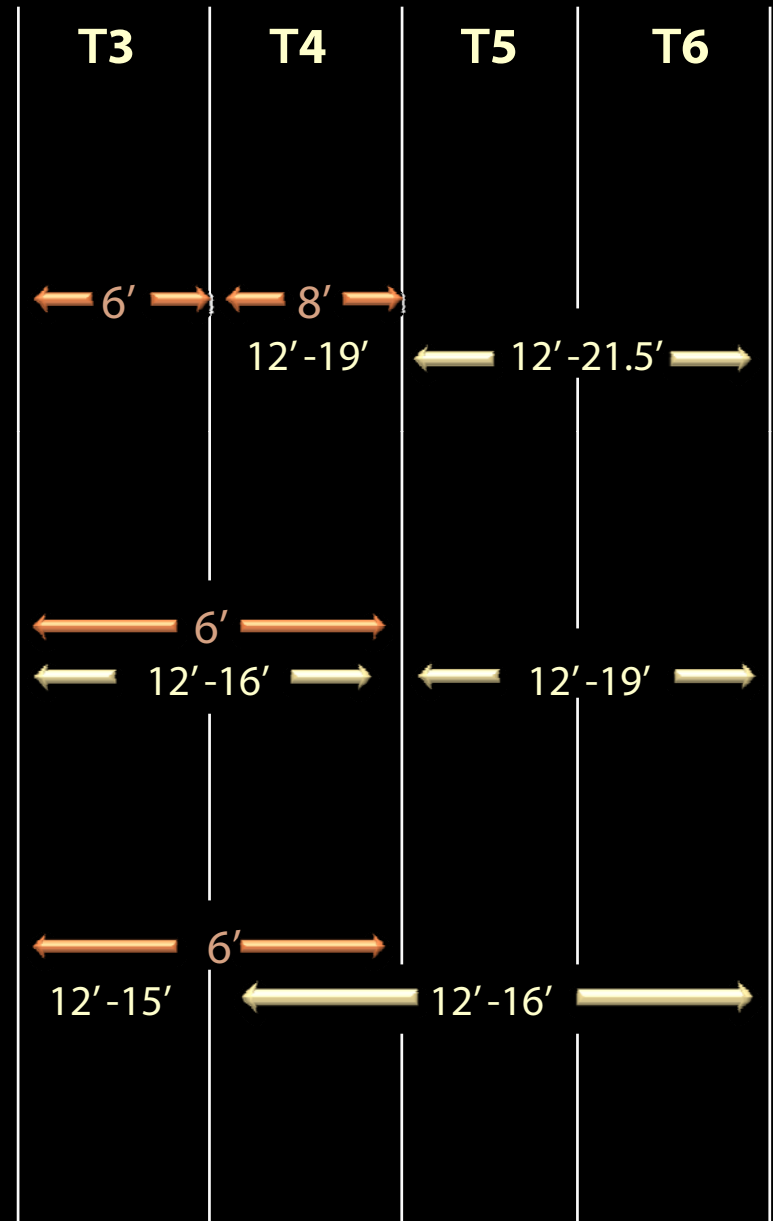
Residential Frontage
Commercial Frontage

Avenue

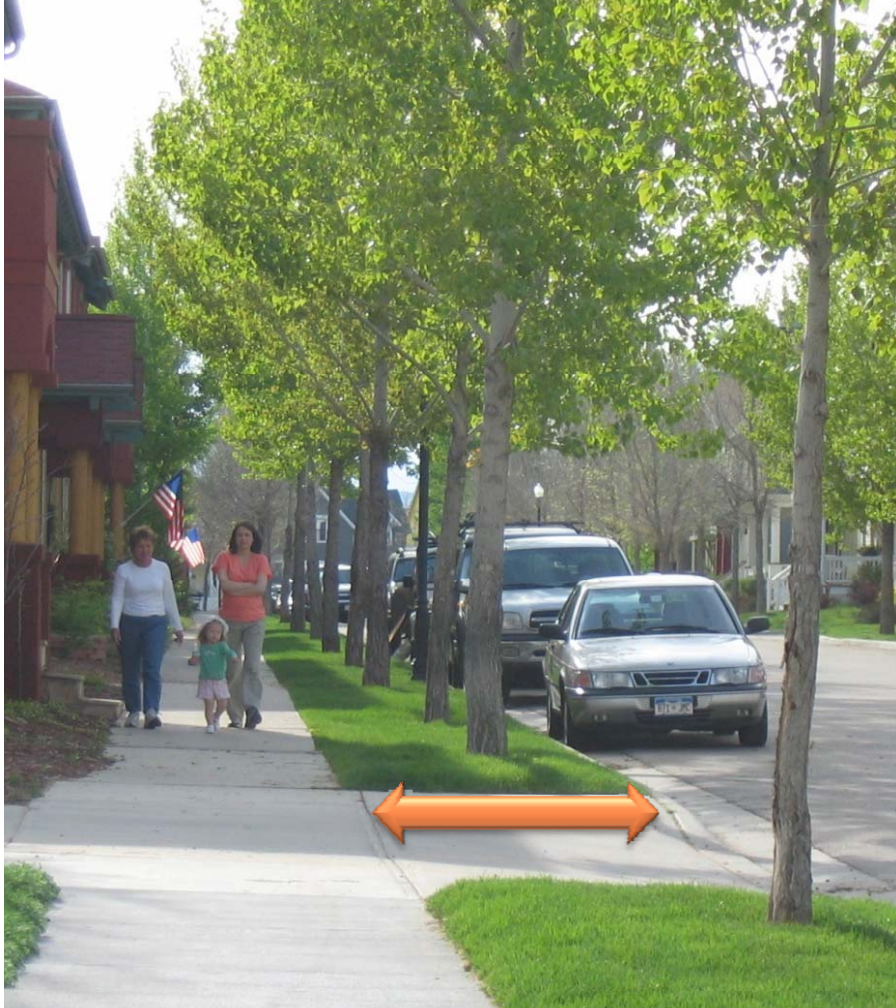
Residential Frontage
Commercial Frontage

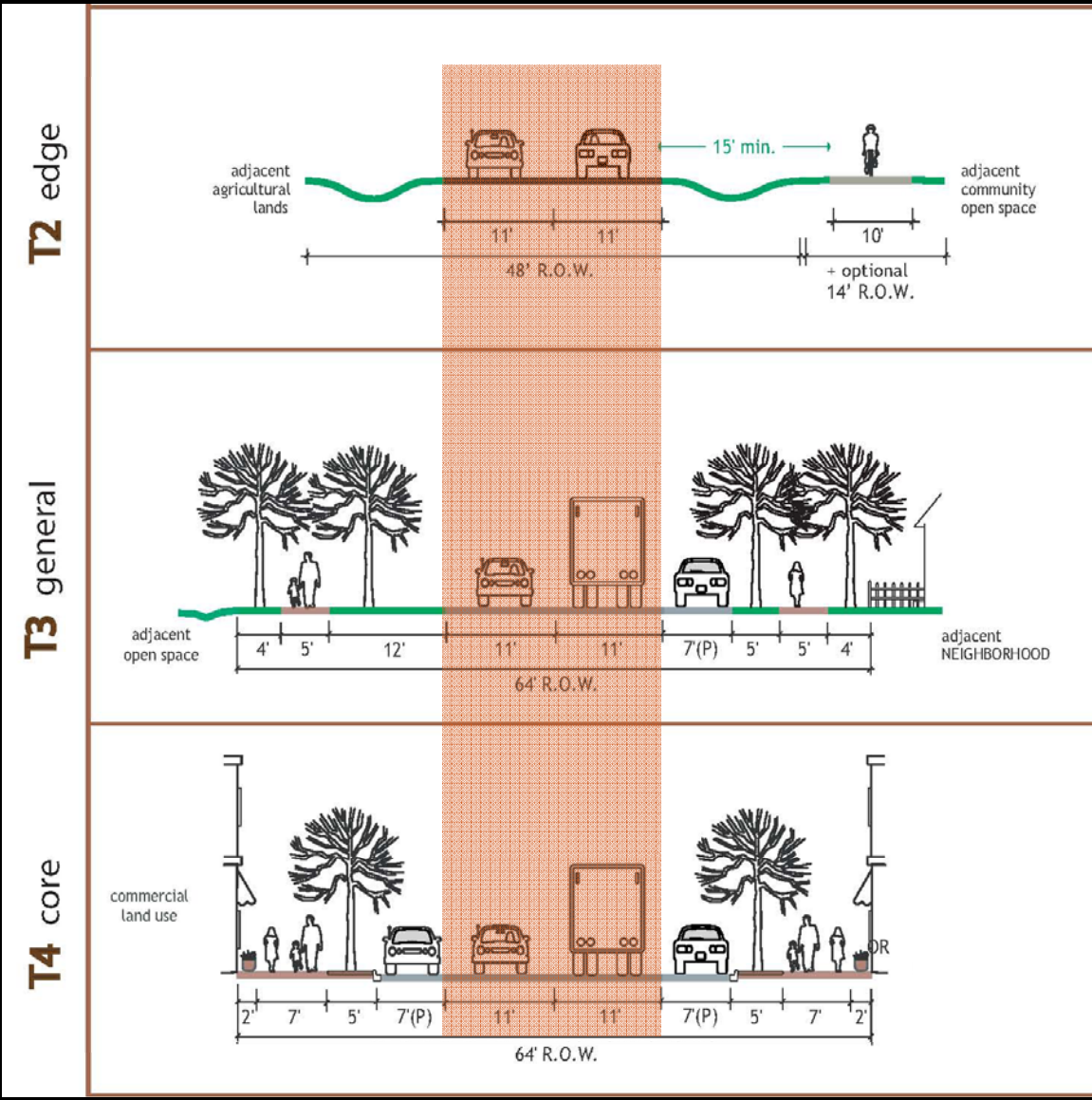
Boulevard

Residential Frontage
Commercial Frontage









Collector Roadway Type Hali'imaile, Maui



Pedestrian Science

