Palo Alto's Zoning Ordinance Update:

A “Context-Based” Design Code for Pedestrian & Transit-Oriented Development

Rail-Volution
November 2006
Palo Alto Zoning Ordinance Update. Project Overview

City of Palo Alto
City of Palo Alto

- Population: 58,000
- Between San Francisco and San Jose
- Adjacent to Stanford University
- Silicon Valley: high-tech focus
- Vibrant downtown (University Avenue)
- Attractive but expensive housing
- Pedestrian and bicycle friendly
- Two transit (commuter train) stations
- Virtually “built out”
Zoning Ordinance Update

- Initiated in 2002
- Van Meter Williams Pollack and Kevin Gardiner & Associates of San Francisco, and Urbsworks of Portland, OR
- Emphasis on “form-based” zoning (later rechristened “context-based design”)
- “Pedestrian” designation added to “Transit Oriented”
Comprehensive Plan Mandates

ISSUES:

• Transit-Oriented Zoning to serve existing transit
• “Form-Based Zoning” to be included in update of Zoning Ordinance
Issues Papers

What is Transit-Oriented Residential/Mixed Use?

Overview:
- Higher density residential development is made more attractive by the availability of public transportation and pedestrian access.
- Design guidelines will be prepared to ensure that development is consistent with the overall vision for transit-oriented development.
- Existing transit-oriented development will be reviewed to identify areas for improvement.
- New development will be designed to meet the needs of current and future users.

Intention:
- To encourage mixed-use development in areas where public transportation and pedestrian access are available.
- To promote the efficient use of space and resources.
- To ensure that development is consistent with the overall vision for transit-oriented development.

Transit-oriented development is characterized by:
- A higher concentration of people and activities in a smaller area.
- A mix of uses, such as residential, commercial, and public spaces.
- A strong pedestrian network.
- A connection to public transportation systems.

Transit-oriented development is important because:
- It reduces the need for private vehicles.
- It improves air quality and reduces noise pollution.
- It promotes a healthier lifestyle.

Mixed Use:
- The integration of different land uses in a single development.
- Examples include retail, office, and residential spaces in close proximity.

Floor Area Ratio (FAR):
- The ratio of the total floor area of a building to the area of the land on which it is located.
- It is a key factor in determining the density of development.

Compatibility:
- The degree to which different uses can coexist without conflicting.
- Examples include residential and commercial uses.

View Corridors:
- Areas designated for the view of important landmarks or natural features.
- They are designed to protect and enhance the visual character of the area.

Sustainability:
- The ability of a development to meet its needs without compromising the ability of future generations to meet theirs.
- Examples include the use of renewable energy sources.

Parking Design:
- The layout and provision of parking spaces.
- It is important to consider the needs of different kinds of vehicles, including bicycles and electric vehicles.

City of Palo Alto
## Zoning Ordinance Update: Pedestrian/Transit Oriented Development (PTOD)

### Virtual Tour - Local References

<table>
<thead>
<tr>
<th>TRANSIT ORIENTED / MIXED USE REFERENCES - PALO ALTO</th>
<th>Project Sheets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>425-27 Alma Street</strong></td>
<td>X X X</td>
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<tr>
<td>- Transit-Oriented</td>
<td></td>
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<tr>
<td>- Mixed Use</td>
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<tr>
<td>- Public Parking Resource</td>
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<tr>
<td><strong>Palo Alto Central</strong></td>
<td>X X</td>
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<tr>
<td>181-183 California Avenue, at Caltrain Station</td>
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<tr>
<td>- Transit-Oriented</td>
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<tr>
<td>- Mixed Use</td>
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<tr>
<td>- Public Parking Resource</td>
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<tr>
<td><strong>4131 B Camino Real</strong></td>
<td>1 X X</td>
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<tr>
<td>near Portage, south of Page Mill Road</td>
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<tr>
<td>- Park Place, Mountain View</td>
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<tr>
<td>- Transit-Oriented</td>
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<tr>
<td>- Affordable Single Room Apartments</td>
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<td>- Reduced parking ratios</td>
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<tr>
<td><strong>Alma Place</strong></td>
<td>X X X</td>
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<tr>
<td>725 Alma Street</td>
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<tr>
<td>- Transit-Oriented</td>
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<tr>
<td>- Affordable Single Room Apartments</td>
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<tr>
<td>- Reduced parking ratios</td>
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<tr>
<td><strong>653-681 Waverley Street</strong></td>
<td>X X X</td>
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<td>between Hamilton and Forest</td>
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<tr>
<td><strong>365 Forest Street</strong></td>
<td>X X X</td>
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<tr>
<td>between Waverley and Gilman</td>
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<tr>
<td>- Ground floor mixed office</td>
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</tbody>
</table>

### Reference Lists and Project Sheets

**Park Place, Mountain View**

**Development Statistics**

- Residential Use: 120 units
- Parking: 180 spaces
- Pedestrian-Oriented
- Sustainable-oriented

**Development Analysis**

- Three story Park Place will use
- Mixed-use middle
- Pedestrian-Oriented
- Sustainable-oriented
- Accommodates
- Pedestrian-Oriented
- Sustainable-oriented

**Site Plan**

- Internal blocks are exclusively residential
California Avenue Overlay District

**Impetus:** City Council changes existing zoning to push along PTOD; two Housing Element sites with active development applications effected.
California Avenue Overlay District

Aerial of California Avenue District
California Avenue Overlay District
California Avenue District PTOD Overlay Zone

2,000 ft radius

15 minute walk
California Avenue Overlay District

California Avenue District PTOD Overlay Zone

Area: 84 acres

Land Use Mix:

- Commercial: 19.9%
- Residential: 18.1%
- Indust/General Manufacturing: 23.3%
- Mixed Uses & PC’s: 27.9%
- Public: 10.8%

2,000 ft radius

15 minute walk
California Avenue Overlay District

California Avenue District PTOD Overlay Zone

- Range of parcel sizes: from 5,000 sq ft to 10+ acres
- No vacant parcels
- Infill: not a redevelopment
- “Elective” overlay - may select either existing zoning or PTOD
Zoning Ordinance Update. Pedestrian Transit Oriented Development (PTOD)

Ordinance Features

A “hybrid”- form-code elements combined with more conventional elements

Chapter 18.66
PEDESTRIAN AND TRANSIT ORIENTED
DEVELOPMENT COMBINING DISTRICT

Sections:
18.66.010 Purposes
18.66.020 Applicability
18.66.030 Land Uses
18.66.040 Pedestrian and Transit Oriented Development (PTOD)
Combining District Regulations
18.66.050 Context-Based Design Criteria
18.66.055 Review Process
18.66.070 Non-conforming Uses & Non-complying Facilities

18.66.010 Purposes
(a) California Avenue Pedestrian and Transit Oriented Combining District

The California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District is intended to allow higher density residential dwellings on commercial, industrial and multi-family parcels within a walkable distance of the California Avenue CALtrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that:
(1) support use of public transportation;
(2) encourage a variety of housing types, commercial retail and limited office uses;
(3) encourage project design that achieves an overall context-based development for the PTOD overlay area;
(4) require streetscape design elements that are attractive to pedestrians and bikers;
(5) increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and
(6) implement the City’s Housing Element and Comprehensive Plan.

(b) [Reserved]

18.66.030 Land Uses

(a) The following land uses shall be permitted in the California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District, subject to limitations outlined in Sections 18.66.040 and 18.66.050.

<table>
<thead>
<tr>
<th>Land Uses</th>
<th>PTOD - California Avenue</th>
<th>PTOD - University Avenue [Reserved]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live/Work Units</td>
<td>CUP</td>
<td>Subject to limitations of Sec. 18.66.010B</td>
</tr>
<tr>
<td>Mixed-use development, where residential and non-residential uses are combined</td>
<td>P</td>
<td>See Section 18.66.010B below for specific uses</td>
</tr>
<tr>
<td>Multiple-family residential housing</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Mixed-use development, where residential and non-residential uses are combined</td>
<td>P</td>
<td>See Section 18.66.010B below for specific uses</td>
</tr>
<tr>
<td>Tenant</td>
<td>P</td>
<td>Subject to limitations of Sec. 18.66.010B</td>
</tr>
</tbody>
</table>

(1) Mixed Use Development, where residential and non-residential uses are combined, may include two or more of the following uses:
1. Multi-family residential
2. Non-residential uses, limited to:
   (A) Retail and personal services;
   (B) Eating and drinking services;
   (C) Other non-residential uses allowed except on the ground floor where an (B) overlay exists:
      (i) Offices;
      (ii) General business services;
      (iii) Business and trade schools;
      (iv) Private education facilities;
      (v) Day care center;
      (vi) Community center;
      (vii) Commercial recreation;
      (viii) Convalescent facility; and
Ordinance Features

A “hybrid” - form-code elements combined with more conventional elements
Development Standards

Emphasis on:
- Pedestrian environment
- Mix of uses
- Range of housing types

Incorporates:
- Architectural Review Board design criteria
- Standards from other newly adopted zoning, including area plans
Neighborhood Concerns
Neighborhood Concerns

Responses:
• Small-Group Meetings
• Additional Analyses and Studies
• Relevant Feedback
Neighborhood Concerns

Zoning Ordinance Update. Pedestrian Transit Oriented Development (PTOD)

PTOD Frequently Asked Questions

1. What is Pedestrian and Transit Oriented Development (PTOD)?
2. Why is the PTOD District being proposed? What are the benefits to the community?
3. Where will the PTOD zoning apply?
4. How is a PTOD project reviewed? Is PTOD a rezoning?
5. Will I as a member of the community be able to comment on a proposed PTOD project and decision?
6. What kinds of uses will be allowed under the PTOD zoning? Who decides?
7. What densities, heights, and floor area would be allowed by the PTOD? What about parking?
Neighborhood Concerns

Neighborhood #1: Concerns that new development will restrict views, be unattractive, invade privacy, amplify train noise
Site Sections

Section A

Section B
Zoning Ordinance Update. Pedestrian Transit Oriented Development (PTOD)

Site Sections

Section C

Section D
Context Based Design: Simulations
Zoning Ordinance Update. Pedestrian Transit Oriented Development (PTOD)

Context Based Design: Simulations
Context Based Design: Step V Railroad Adjacency

d. Design with articulation, setbacks, and materials that minimize massing, break down the scale of buildings and provide visual interest from the train and neighborhood across the tracks.

e. No more than seventy percent of the street facade should exceed the height of 25 feet.

f. Landscape elements such as trees and fencing should be used as a buffer between the rear of lot and railroad tracks.

g. Daylight plane requirements for R-1 and R-2 adjacencies apply to railroad adjacency.
Neighborhood Concerns

Neighborhood #2: Concerns that high density development will decrease property values and lower standard of living
Context Based Design: “Step V” Examples

4. Low-Density Residential Transitions

Where new projects are built adjacent to existing lower-scale residential development, care shall be taken to respect the scale and privacy of adjacent properties through:

- a. Transitions of development intensity from higher density development building types to building types that are compatible with the lower intensity surrounding uses, such as Village Residential land uses;

- b. Massing and orientation of buildings that respect and mirror the massing of neighboring structures by stepping back upper stories to transition to smaller scale buildings, including setbacks and daylight planes that match adjacent R-1 and R-2 zone requirements;

<table>
<thead>
<tr>
<th>Diagram 1</th>
<th>Diagram 2</th>
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<tbody>
<tr>
<td>Initial height of daylight plane: 16' at rear yard, 10' at side yard.</td>
<td></td>
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<tr>
<td>Use High Windows on the second floor.</td>
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<tr>
<td>Combination of Trees and hedges for screening.</td>
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<tr>
<td>Combination of Trees and hedges for screening.</td>
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<tr>
<td>Existing SF Homes.</td>
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</table>

- c. Respecting privacy of neighboring structures, with windows and upper floor balconies positioned so they minimize views into neighboring properties;

- d. Minimizing sight lines into and from neighboring properties;

- e. Limiting sun and shade impacts on adjacent properties;

- f. Design creativity to address compatibility with adjacent structures;

- g. Pedestrian paseos and mews to create separation between uses.
Context Based Design: “Step V” Examples

I. Pedestrian and Bicycle Environment

The design of new projects shall promote pedestrian walkability, a bicycle friendly environment, and connectivity through design elements such as:

- Connectivity for pedestrians and cyclists with external and internal (if any) streets, pathways, or bike facilities;
- Pathways and streets that present a clear hierarchy and connectivity pattern both within a project and to adjacent sidewalks;
Context Based Design: “Step V” Examples

2. Street Building Facades

Street facades shall be designed to provide a strong relationship with the sidewalks and the street(s), to create an environment that supports and encourages pedestrian activity through design elements such as:

a. Facade articulation reflecting the rhythm of nearby commercial and residential areas such as California Avenue;

b. Placement and orientation of doorways, windows, and landscape elements to create strong, direct relationships with the street;

c. Facades that include projecting eaves and overhangs, porches, and other architectural elements that provide human scale and help break up building mass;

d. Entries and windows that face onto the street;

e. Entries that are clearly defined features of front facades, and that have a scale that is in proportion to the size of the building and number of units being accessed; larger buildings should have a more prominent, centralized building entrance, while maintaining a pedestrian scale; and

f. Residential units and storefronts that have a presence on the street and are not walled-off or oriented inward.
Context-Based Design:
“Step V” Examples

Zoning Ordinance Update. Pedestrian Transit Oriented Development (PTOD)

7. Large (multi-acre) Sites

Large (in excess of two acres) sites shall be designed so that street, block, and building patterns are consistent with those of the surrounding neighborhood, and such that:

a. New development of large sites maintains and enhances connectivity with a hierarchy of public streets, private streets, walks and bike paths (integrated with Palo Alto’s Bicycle Master Plan, when applicable);

b. The diversity of building types increases with increased lot size (e.g., <1 acre = minimum 1 housing type; 1-2 acres = minimum 2 housing types; greater than 2 acres = minimum 3 housing types);

c. Where site includes more than one housing type, each housing type should respond to its immediate context in terms of scale, massing, and design (e.g., Village Residential building types facing or adjacent to existing single-family residences).
Neighborhood #3: Concerns about traffic, parking supply and policy, and project design
Since Adoption

- Ordinance adopted September 2006
- Pipeline projects have been able to use new zoning standards
- A “toolbox” - some standards have been applied to other more general zones, such as Mixed Use
More Information

Code summary at:
www.kevingardiner.com

City of Palo Alto PTOD website:
http://www.city.palo-alto.ca.us/planning-community/ptod.html
QUESTIONS AND DISCUSSION
# Development Standards

**Max Dwelling Units:**
40 DU/AC (50 DU/AC w/ BMR Bonus)

**Max FAR:**
100% Residential 1.0:1 (1.5:1 w/ BMR Bonus)
Mixed-Use 1.25:1 (1.5:1 w/ BMR Bonus)
Mixed-Use non-residential cap 0.35

**Height:**
40’ (50’ w/ BMR Bonus)

**Adjacencies to R-1 and R-2:**
Side yard setback - 6’ (R-2) 8’ (R-1)
Side yard daylight plane - 45 deg @ 10’ height
Rear setback - 20’
Rear daylight plane - 45 deg @ 16’

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<table>
<thead>
<tr>
<th>Standards</th>
<th>PTOD 4 California Ave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Dwelling Units:</td>
<td>40 DU/AC 50 DU/AC with bonus BMR²</td>
</tr>
<tr>
<td>Max FAR:</td>
<td>1.0:1 1.5:1 w/ bonus BMR²</td>
</tr>
<tr>
<td>100% Residential FAR</td>
<td>1.0:1 1.5:1 w/ bonus BMR²</td>
</tr>
<tr>
<td>Mixed Use FAR</td>
<td>1.25:1³ 1.5 w/ bonus BMR²</td>
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<tr>
<td>Mixed Use Non-Residential FAR Cap</td>
<td>0.35⁴</td>
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<tr>
<td>Hotels</td>
<td>2.0</td>
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<tr>
<td>Height:</td>
<td>40 (60 w/ bonus BMR²)</td>
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<td>Open Space</td>
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<tr>
<td>Minimum area required</td>
<td>5 or less units: 200 s.f. per unit 6 or more units: 100 s.f. per unit</td>
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<tr>
<td>Minimum dimensions</td>
<td>Private open space: 6 feet Common open space: 12 feet</td>
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<td>Parking:</td>
<td>Rates established by use, per Section 18.83.050</td>
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<td>Parking Adjustments:</td>
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<tr>
<td>Setbacks and daylight plane requirements for properties adjacent to R-1 and R-2 zones:</td>
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<tr>
<td>Setbacks</td>
<td>On portion of site that abuts: 1. Interior side yard: 6 feet/8 feet⁵ 2. Rear yard: 20 feet</td>
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Context Based Design Criteria

Considerations and Findings

1. Pedestrian Environment - promote walkability and connectivity.
2. Street Building Facades - promote a strong relationship with sidewalk and street.
3. Massing and Articulation - minimize massing and provide articulation.
4. Low-Density Residential Transitions - respect scale and privacy of adjacent properties.
5. Project Open Space - provide usable open space.
6. Parking Design - Parking design should not overwhelm character of building.
7. Large (multi-acre) Sites - building patterns consistent with surrounding neighborhood.
8. Sustainability - sustainability and green building design should be incorporated
9. Historic Preservation