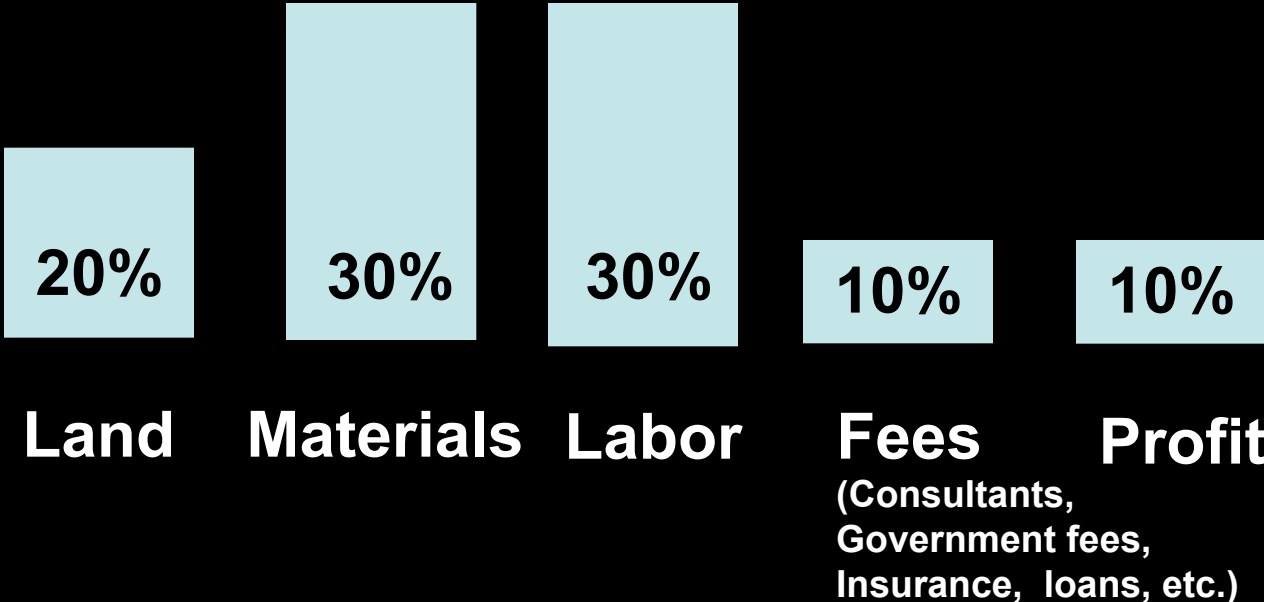


Cozy by Design

Communities for the 21st Century

Presentation in Raleigh, North carolina
April, 2014

Development Costs



What exactly is *Coziness*?

Example: 20 *family* dwellings

- Dwelling Units/acre 20 Kitchens/acre
- Bedrooms/acre 50 bedrooms/acre (assume 2.5 brms/d.u.)
- People/acre 88 people/acre (assumes 1.75 people/
brm)

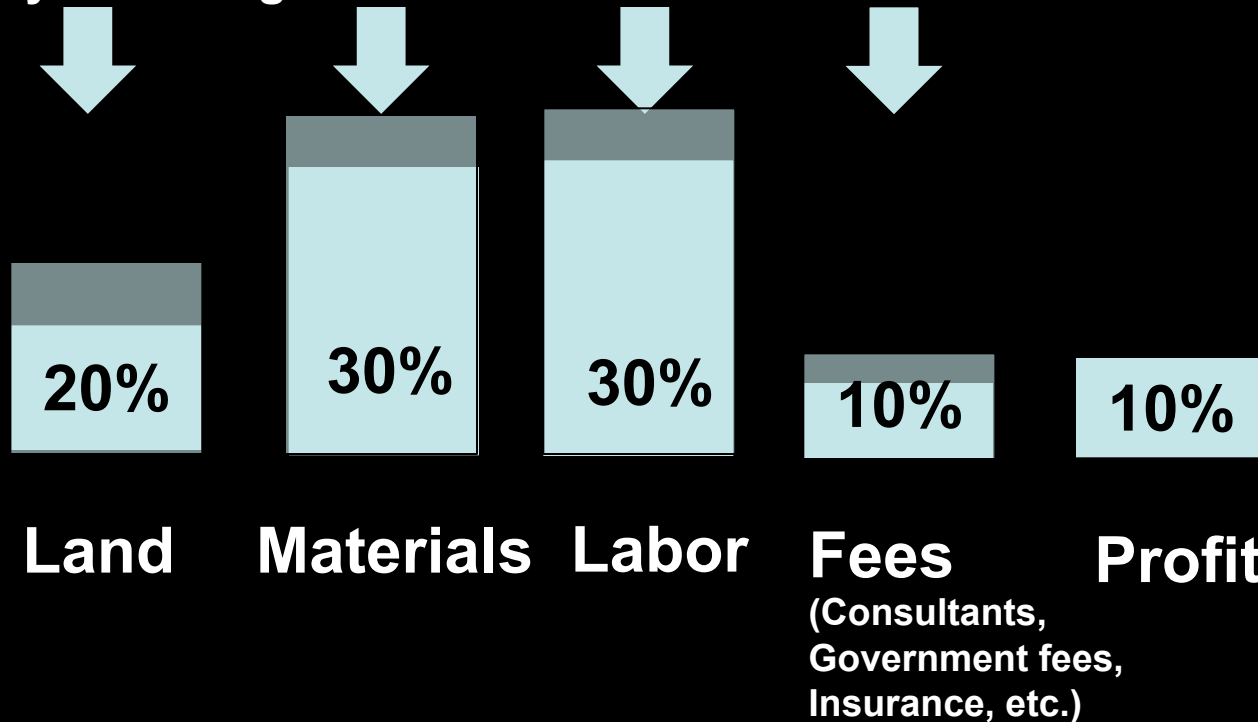
Extrapolate to City-Wide (assumes about 30% of project density)

- People/acre 26 people/acre
- People/sq. mile 26 people X 640 acres/sq mi = 16,640

San Francisco

Development Costs and *Coziness*

Higher levels of *Coziness* lower development costs per unit by achieving economies of scale





Rome

5,150/sq mi



London

11,000/sq mi



Paris

64,000/sq mi



Raleigh, 3000/sq mi



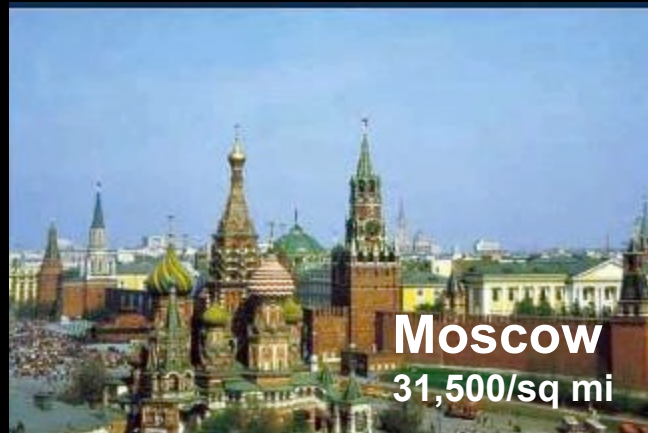
Athens

26,500/ sq mi



Amsterdam

11,200/sq mi



Moscow

31,500/sq mi

**Coziness
and Cultural
Adaptation**



Chicago
12,400/ sq mi

San Francisco
16,000/ sq mi
(Mumbai slums, at 1 and 2 stories)

Brooklyn
26,000/ sq mi

Manhattan
67,000/ sq mi

Seattle
5,430/sq mi



Boston
12,200/ sq mi

Salt Lake City
1640/ sq mi



Phoenix
2,700/ sq mi



Denver
3,250/ sq mi



Benefits of Higher Levels of *Coziness*

- Reduces costs of land and land development per unit
- Reduces all other development costs per unit
- Improves the financial feasibility of public transit
- Improves the viability of local retail
- Increases social connections, participation in local institutions
- Increases and enriches cultural life
- Decreases automobile dependence, air pollution; increases walkability and healthier lifestyle

Possible Negatives of Higher Levels of *Coziness*

- Increases value of real estate, causing displacement
- New people to a neighborhood may be insensitive to its history
- Increases load on local schools
- May increase traffic and demand for parking, depending on land use distribution
- Increases demand for services

5 Ways to change attitudes to accept more **Cozy** Communities

1. **Participatory Design:** involve neighbors and potential buyers/renters in earliest stages
2. **Collaborative Design:** involve planning and other agencies as participants or observers
3. **Fitting the Context:** understand the local history, culture and latest local available technologies
4. **Personalization:** Provide opportunities for residents' self-expression and change
5. **Sustainability:** understand local climate and economy to save energy, water, land, material resources; mixed use and transit-related

- 1. Participatory Design***
- 2. Collaborative Design***



Community Participation in Planning and Design

Neighbors can be organized by the developers and their architects into work teams using modeling kits to explore site plan options, home designs and stylistic preferences. In the process, neighbors become educated about how to design for higher levels of coziness without losing the character of their neighborhood.





Design workshops with neighbors

Resulting levels of coziness acceptable to neighbors have sometimes been as much as two-three the existing neighborhood after the neighbors have a chance to study their options with modeling kits



3. Fitting In



- 1. Children
- 2. Meeting Room
- 3. Typ. Two Bedroom Home (expandable to four)
- 4. Typ. Three Bedroom Home (expandable to five)
- 5. Expandable Three Bedroom Home (with grandparent suite)
- 6. Expandable Three Bedroom Home (with workplace optional)
- 7. Pedestrian/Active Court
- 8. Future Garage (with bedrooms and deck above)



Street edge ↑

Auto courts ↓



Comfortable Coziness: Lower massing in the front, higher Massing in the rear along the interior auto courts; use compatible styles

22/acre; 100 people/acre



First Level

1. Kitchen/Dining
2. Living
3. Bedrooms
4. Master Bedroom
5. Future Office/Business

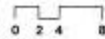
7. Future Garage
8. Future Bedroom
9. Future Roof Deck



Second Level



Third Level



Expandable Three Bedroom Home (with home business option)



First Level



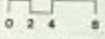
Second Level



Third Level

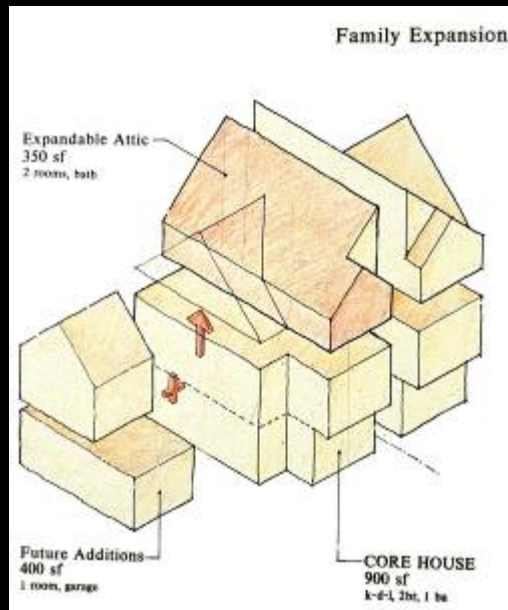
1. Kitchen/Dining
2. Living
3. Bedroom
4. Master Bedroom

6. Grandparents
7. Future Garage
8. Future Bedroom
9. Future Roof Deck



Expandable Three Bedroom Home (with grandparent suite)

Expandable,
Live-Work,
In-Laws



Family Expansion

Expandable Attic
350 sf
2 rooms, bath

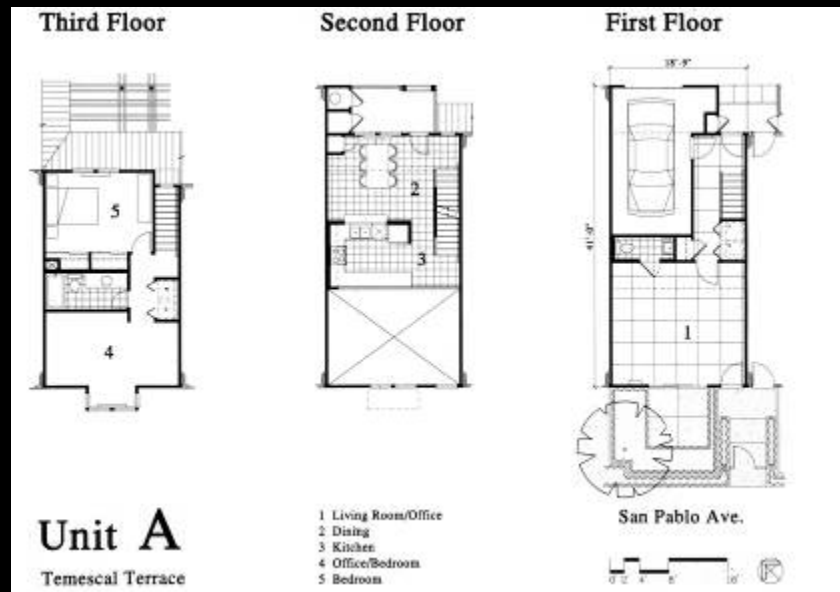
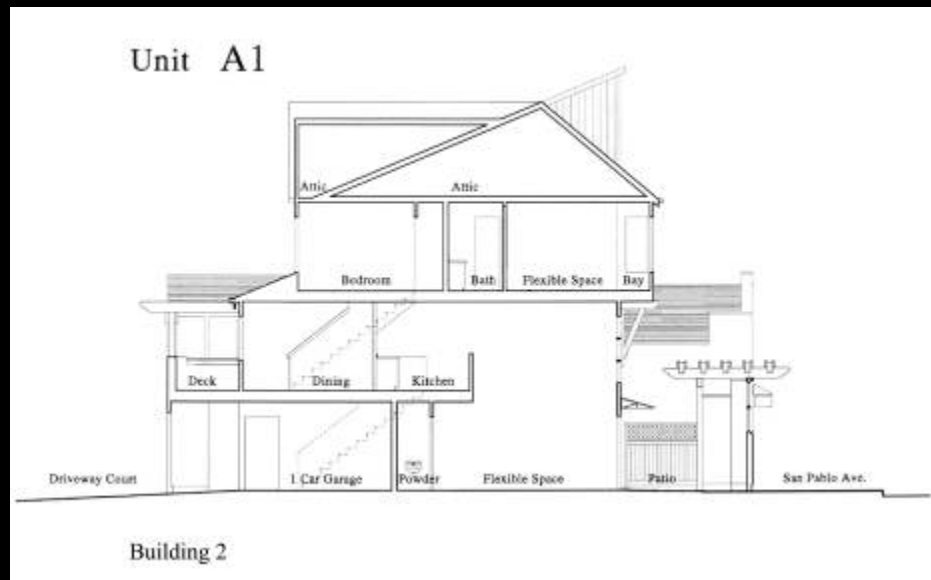
Future Additions
400 sf
1 room, garage

CORE HOUSE
900 sf
k-d-l, 2br, 1 ba





Double-height front rooms can be used as living rooms or businesses. Front patio walls provide privacy and sound protection, but large windows in the patio walls allow them to be used as show windows for businesses.



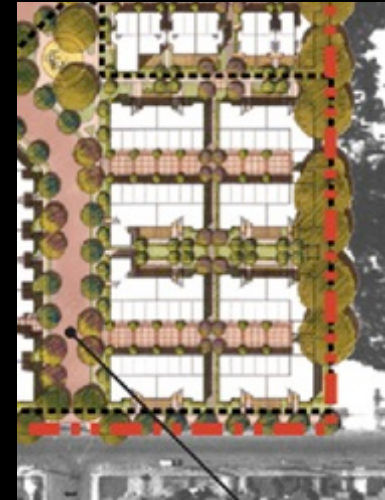
Live-Work: Re-Populating Formerly Commercial Boulevard **35/acre; 130 people/acre**



Front Business / Rear Residential

Behind the storefronts, families use the auto-court for social gatherings and play areas.

HOPE VI



Auto + Pedestrian Courts

35/acre; 145 people/acre
1 auto/unit

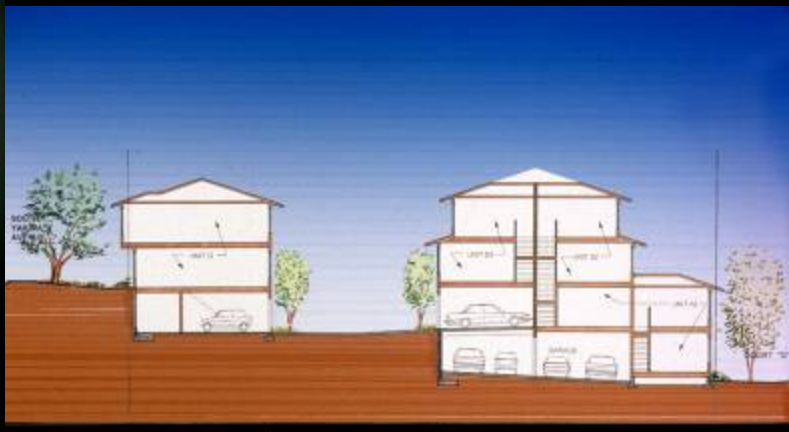
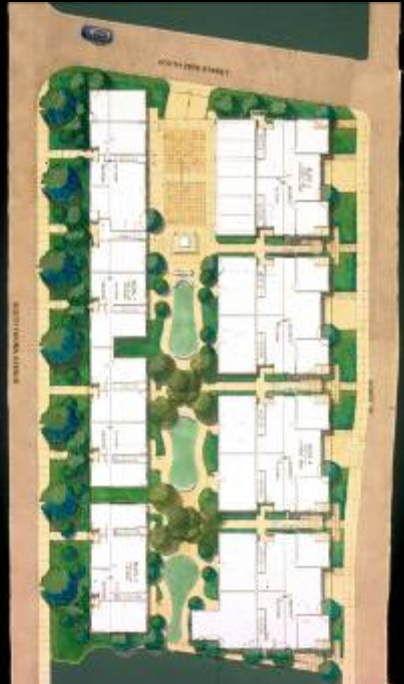


Pedestrian Courts



Auto Courts





**Hillside
Townhomes
40/acre;
150 people/acre**





Downhill Townhomes: Group Garages





**Live-Work
on the boulevard**

**40/acre
150 people/acre**



**Senior Housing
as
'Grand Hotel'**

**40/acre
60 people/acre**



Puyallup, WA

Seniors

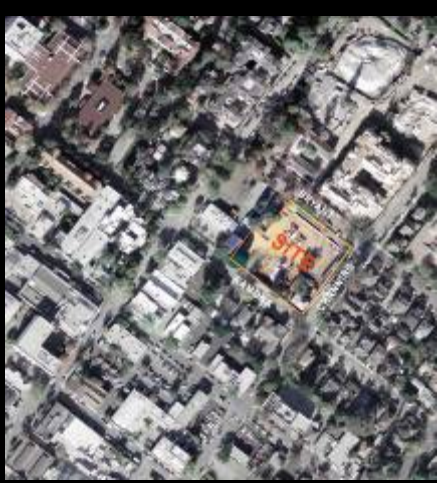


Formerly Homeless Women and Children



An Apartment Building as a 'Lodge'

40/acre
55 people/acre



Porches with stoops rise to the lid above the parking garage.



Courtyard above parking garage



Family Infill
Underground Parking

50/acre
185 people/acre

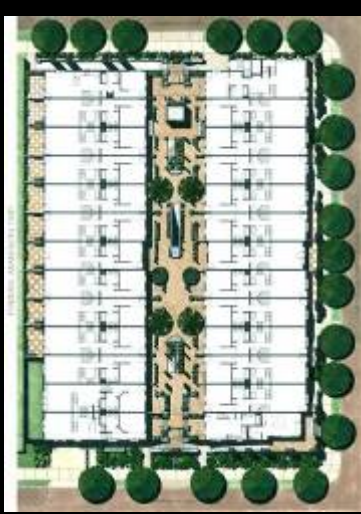




Mixed Use: Housing above adult education and child care 75/acre on two boulevards with six bus lines:



Family Village: behind the boulevard building 35-10/a



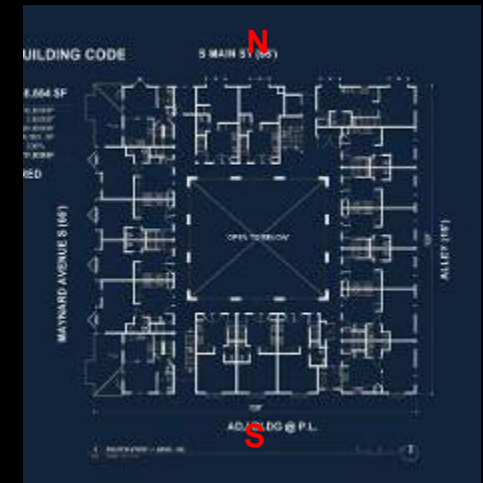
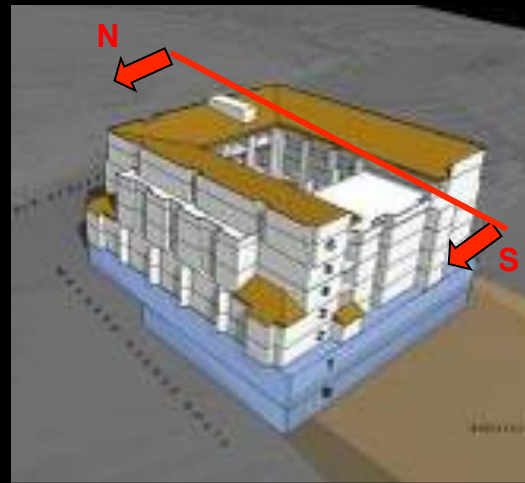
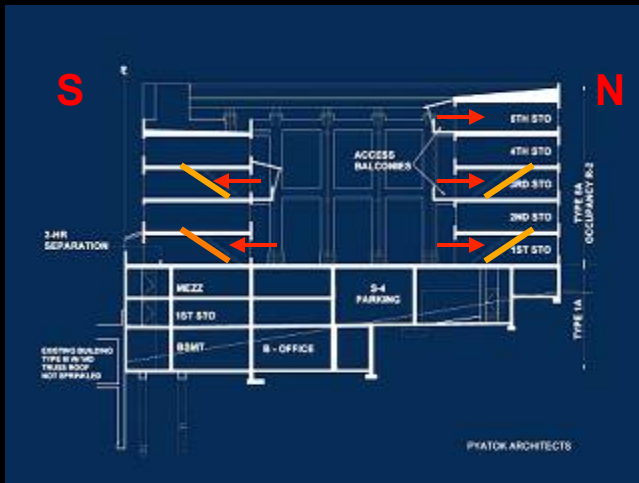
28'-wide, 50'-tall court provides ample space, light and shade for the residents.



92 Downtown Lofts/Apartments

135/acre (TYPE V, Wood Frame); 200 people/acre



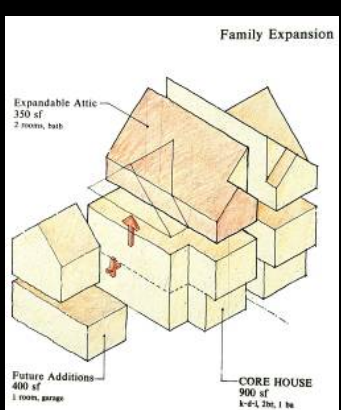


51 Rental Apartments (36 townhomes, 15 flats on 1/3 acre)

150 Units/Acre; 500 people/



4. Personalization



5. Sustainable

- ***Compact***
- ***Mixed-use***
- ***Transit-related***
- ***Climate, energy, water***
- ***Materials***



Mixed Use, Transit related

20 market rate co-housing, 20 rental for very low incomes
40,000 sf of retail, commercial, educational, cultural uses
100 years old: vacant since 1980—restored by a non-profit corporation



Market Hall, street cafes, affordable housing, convenience store, commercial space, plaza



Cultural activities, farmer's market, co-housing, children's art institute



Conversion of former market hall into co-housing

Downtown Affordable Family Housing

100/acre; 350 people/acre







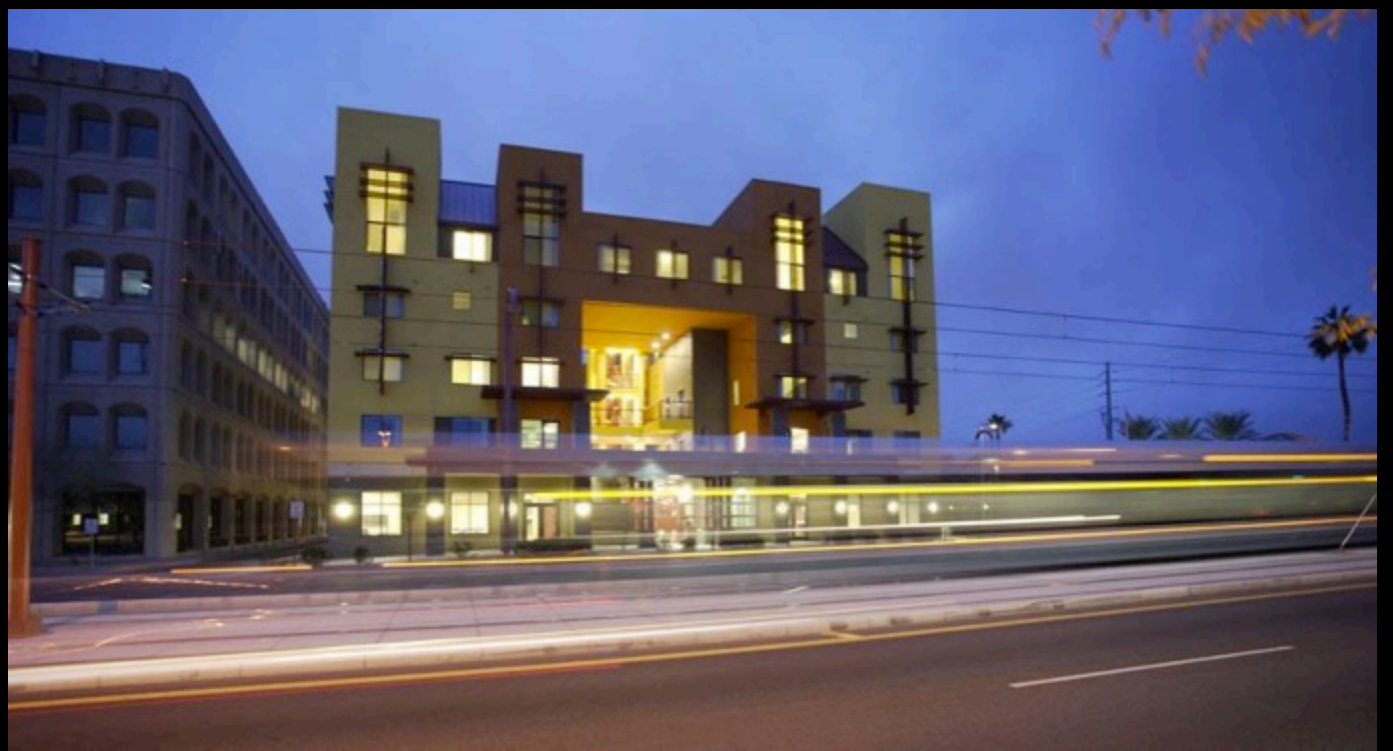
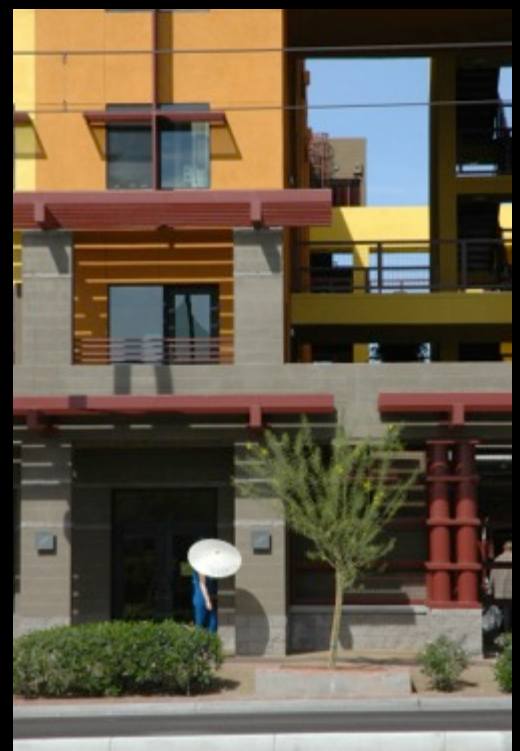
Transit-Related Rental

Phoenix

30-120 AMI

100 units/acre
375 people/acre









Individualism



“Each man is forever thrown back on himself alone, and there is a danger that he may be shut in the solitude of his own heart.”

Alexis de Tocqueville, 1840s

Communalism



“Americans of all ages, all conditions, and all dispositions constantly form associations ...commercial and manufacturing associations... associations of a thousand other kinds-- religious, moral, serious, futile, general or restricted, enormous or diminutive. Wherever at the head of some new undertaking you see the government of France, or a man of rank in England, in the United States you will be sure to find an association”