University of Arizona
Tucson, Arizona

Community Outreach Partnership
Planning & Design Center

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U.S. Department of Housing and Urban Development, Office of University Partnerships

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SITE FEATURES

- Residential
- Parks
- Washes
- Schools
- Commercial
- Railroad
- Points of Interest
### Demographics: Population Characteristics

*Source: 2000 U.S. Census Bureau*

<table>
<thead>
<tr>
<th></th>
<th>BARRIO SAN ANTONIO</th>
<th>EMPOWERMENT ZONE</th>
<th>CITY OF TUCSON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong></td>
<td>272</td>
<td>52,256</td>
<td>486,699</td>
</tr>
<tr>
<td><strong>RACE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>68.01%</td>
<td>52.59%</td>
<td>70.20%</td>
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<tr>
<td>Black</td>
<td>2.57%</td>
<td>4.55%</td>
<td>4.30%</td>
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<tr>
<td>Native American</td>
<td>2.57%</td>
<td>4.48%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.57%</td>
<td>2.11%</td>
<td>2.50%</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>.37%</td>
<td>0.18%</td>
<td>0.20%</td>
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<tr>
<td>Other</td>
<td>18.01%</td>
<td>31.63%</td>
<td>16.80%</td>
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<tr>
<td>Multiple Races</td>
<td>5.88%</td>
<td>4.45%</td>
<td>3.80%</td>
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<tr>
<td><strong>ETHNICITY</strong></td>
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</tr>
<tr>
<td>Hispanic*</td>
<td>52.57%</td>
<td>59.39%</td>
<td>35.70%</td>
</tr>
<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Males</td>
<td>49.26%</td>
<td>49.90%</td>
<td>49.00%</td>
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<tr>
<td>Females</td>
<td>50.74%</td>
<td>50.10%</td>
<td>51.00%</td>
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<td><strong>AGE</strong></td>
<td></td>
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<tr>
<td>Under 18</td>
<td>23.90%</td>
<td>26.88%</td>
<td>28.66%</td>
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<tr>
<td>Over 65</td>
<td>7.72%</td>
<td>8.54%</td>
<td>11.90%</td>
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</tbody>
</table>
Land Use

- Residential
- Commercial
- Heavy Commercial/Industrial/Railroad/Bus Parking
- Public/Institutional
- Vacant/Parking
- Park/Washes/Open Space

Source: Windshield survey by the Drachman Institute, 2004
$ = Estimated repairs to bring to excellent condition

- **Excellent: $0**
  New construction, everything is kept up

- **Good: Up to $10,000**
  Needs minor cosmetic touch ups, part of normal maintenance

- **Fair: $10,000-$20,000**
  Fixer-upper, general condition is good but needs some work

- **Poor: $20,000-$40,000**
  Needs a lot of work/money but is not bad enough to tear down

- **Replacement:**
  Cost of repairs is greater than the cost of replacement

Source: Windshield survey by the Drachman Institute, 2004
DUNBAR SPRING NEIGHBORHOOD
Tucson, Arizona
Community Futures Demonstration Project
Drachman Institute ~ University of Arizona
2005
SOUTH PARK NEIGHBORHOOD

Community Futures Demonstration Project
Drachman Institute ~ University of Arizona

2005
Community Outreach Partnership Planning & Design Center
The University of Arizona

Site Analysis

Parcel 118-22-3680

Melissa Tom
Arc 326
October 22, 2004
Table of Contents
Created October 24, 2004
Site parcel: 118-22-3680

Description of Project and Site
Location
1. Location of Site in Arizona and Tucson
2. Location of Site in Empowerment Zone and Neighborhood

Neighborhood Context
3. Figure Ground Area
4. Zoning and Land Use around Site
5. Circulation of Traffic, Pedestrians, Bikes, and Buses around Site

Size and Zoning
6. Dimensions and Size of Lot and Rights of Way
7. Zoning of Site and Legal Descriptions

Sensory
8. Views from Site
9. Views into site
10. Air, Ground and Noise Pollution

Utilities
11. Water and Sewage Locations
12. Power, Telephone, and Gas Locations

Natural and Man Made Features
13. Vegetation and Built Features
14. Water Drainage around Site

Human and Cultural
15. Negative Activity
16. Census Information of South Tucson

Climate
17. Rainfall and Temperature
Major Traffic Magnet from Interstate 10

Liberty Ave Bikeway

New paved road and sidewalks

Minor Traffic Magnet

High level of pedestrian and bicycle traffic on weekends. More vehicular traffic on weekdays.

Circulation

Neighborhood Context

Vehicular Circulation

Bus Circulation

Bicycle Circulation
Views from Site Sensor

- **junkyard, bad view**
- **view of 10' wide, concrete drainage system**
- **top of a mountain, good view**
- **vacant lot with future view of residence or small business and parking lot of Bank One, current bad view**
- **residents next door, windows typically closed lack of privacy for existing residents**
- **view towards walgreens and intersection of 6th Ave and 29th St**
- **cmu wall blocks most views to south**
Primavera Foundation

• A non-profit organization created to assist the homeless
  » “grass roots, volunteer and advocacy-oriented base”

• St Martin’s Center Soup Kitchen
  » Lawsuit
  » Primavera Foundation

• Founded in 1982
Site Plan Options

51 units
11 2-bedroom units
24 3-bedroom units
16 4-bedroom units

31 units with commercial
11 2-bedroom units
12 3-bedroom units
8 4-bedroom units
Cluster Context
South Tucson Infill

Charles Calloway, Daniel Tylutki

- Working with South Tucson
- Working with builder, Fernando Loya
- Working with Mikey Block material supplier
The project is a continuation of existing commercial design work done on the corner. It began as a collaborative with retail and mixed-use building. Originally, the space was a building with retail front. Influenced by new ideas of construction, the project involved mixing wood, stone, and metal to create a new form.

As part of the renovation, the retail space was redeveloped. The project was designed by an architect who focused on the interaction between the building and the street. One of the materials investigated early in the project was the reuse of existing products.

The project has been further developed through design drawings and models that were used to keep the existing context intact. At the point in design, we also considered the integration of the surrounding areas and the interaction with the public space.
Question:
Can infill development take place within the Empowerment Zone to maximize the allowed density of existing zoning yet, improve the land use efficiency and the quality of outdoor space while protecting the privacy of neighbors?

Problem:
The City of Tucson’s Land Use Code requires setbacks in R-2 and R-3 zoned areas that keeps 25 to 30% of a parcels total area as open space. This setback essentially puts the development at the core of the parcel leaving a remnant of space that does not benefit the community. When infill development occurs on vacant R-2 or R-3 lots, the development results in a product that is reduced to a “box” style development.

Solutions:
1. Lot Development Option (LDO) / Design Development Option (DDO).
2. Find blocks that are “undeveloped”
SOLUTIONS TOWARDS CREATING A MORE RESPONSIVE INFILL DESIGN

1. Design Development Option (DDO) (formerly known as a Lot Development Option)

An DDO is the zoning process adopted by the City of Tucson that provides the ability to modify setbacks on new construction. An DDO can also be used to increase the height of a perimeter wall or fence over six feet. More information on the DDO process is located in Section 5.3.4 of the Tucson Land Use Code.

The city created the DDO in order to:
- Encourage the efficient use of land through design innovation.
- Provide administrative relief to zoning requirements that do not affect the adjacent properties and the surrounding neighborhood and community.
- Provide the ability to modify design requirements in instances where the strict application of the requirement may not be practical due to topography, existing development, whether on site or on adjacent properties; or life safety issues.
- Provide for energy conservation through flexible site and building design.
- Provide for consideration and implementation of alternative design solutions within the intent of the regulation in a timely and efficient manner.

The DDO process takes approximately four weeks to complete. Once staff has accepted the application, notification is mailed to adjacent property owners. They have two weeks to comment on the request. The Planning Director then makes a decision based on the specifics of the request and any comments received. Notification of the decision is then mailed to the applicant and the adjacent property owners. They have two additional weeks to appeal if they disagree with the decision. If no appeal is filed, the Planning Director’s decision becomes final.

Prior to applying for the DDO the developer would be wise to communicate with neighbors on the project and make modifications to the plan so that consensus can be reached and the project ultimately succeeds.

Key facts with DDO’s:
- An DDO is not available if a developer is doing a residential cluster project (RCP), as a RCP already provides less stringent standards.
- An DDO is unlikely to be passed if it adversely affects the privacy of neighbors.
- An DDO is unlikely to be passed if it blocks pedestrian or vehicular visibility.
- An DDO will not increase the number of units or square footage of a parcel zoning still dictates this.
- The modification does not reduce the setback from a street to less than is allowed under the provisions of Sec. 3.2.6.5.B.
- The modification is not for an increase in height of more than two (2) feet to an accessory wall or fence, except that an increase of up to four (4) feet may be considered for entry features on walls and fences.

Lot Development Option with the City of South Tucson

The City of South Tucson also has a Lot Development Option written into their land use code (Sec. 24-536). The purpose of their LDO is to “permit modifications in setback requirements which encourage original and efficient site design.” An LDO application is likely to be denied if the design is considered to be extreme by the Planning staff or if neighboring property owners protest.

2. Find areas that are deemed “developing”

Another way to avoid the standard setback or perimeter yard requirement in the City of Tucson is to locate the future infill development in an area that is “developing”. If an area is developing the front setback of the development can be 21 feet or the height of the building (the greater of the two) from the edge of the nearest adjacent travel lane. This is advantageous from the standard setback which is measured from the curb or from the parcel line. The street however cannot be a collector, an arterial or a street with a daily traffic count of less than 140 vehicles. The diagram below illustrates this measurement.

“Developing areas” is defined as a block where more than 50 percent of the lots do not conform to the required front setback. If a block has a high prevalence of vacancy, meaning no structures exist, that counts in favour of nonconformity. Contrary to this are “developed areas”.

Above is an example of a “developed area”. This location in the West Ochoa Neighborhood is zoned R-3 and requires a 10 feet setback for 1 story homes. A majority of the parcels have a setback of 10 feet or greater (actual setback is in green). Only two lots have a setback less than 10 feet (actual setback is in red).

Above is an example of a “developing area” in the same neighborhood. Here only two of the seven parcels conform to the setback requirement. The other lots are vacant and therefore do not conform to the setback requirement. In this case a developer has a prime opportunity to develop an infill product that is 21 feet from the nearest travel lane which puts front of the unit 1 or 2 feet behind the property line.

The Drachman Institute
College of Architecture & Landscape Architecture

Cross Disciplinary Project by
Architecture: Jared Humphries
Planning: Thomas Thivener

Domestic Communities
SENTINEL PARK
PROJECT GOALS

• To create a mixed-income site plan that complies with the “A” Mountain Neighborhood Plan

• To explore rezoning possibilities and new site designs
SITE EXISTING CONDITIONS

Sentinel Park

- Zoned R-1 (Urban, low density, single-family residential)
  Except for a section of lots 31-32 which are zoned R-2
- 48 lots
- 9.89 gross acres
- Individual Lot size: 7,000 Sq.Ft.
- Allowable Coverage: 70%
EXISTING PLAN
A Partnership:

- The University of Arizona
  The College of Architecture & Landscape Architecture
  Drachman Institute (HUD-Community Outreach Partnership Center),
  Drachman Design/Build Coalition
  Architecture 402 Design Studio
  452 Design/Build Studio
  Landscape Architecture

- Habitat for Humanity Tucson

- Tucson Urban League
The University of Arizona
- Students, Faculty, Staff, Administration, Alumni, Departments, Schools, & Organizations

- $65,000 - Fundraising
- Temporary site for construction of 65% of the house
- Lectures, Educational Opportunities, Information to the Public
- Advertising
- Labor
Proposed Temporary Construction Site

On the U of A Campus @ the Northwest Corner of Speedway Blvd. & Rincon Ave.
Next to the Landscape Architecture Bldg.
Proposed Permanent Home Site
On the Northeast Corner of 24th St. & South Park Ave. (R-2 Zoning)
Proposed Permanent Home Site
On the Northeast Corner of 24th St. & South Park Ave.
Currently Under Review for a Lot Split – Into Three (3) Parcels
Habitat for Humanity & University of Arizona Residence

Landscape Plan

Drachman Design/Build Coalition
819 East First Street Tucson, AZ 85721
An Exploration in Design and Ownership Models

University of Arizona Employer-Assisted Housing

University of Arizona Office of Community Relations: Jaime Gutierrez
Drachman Institute, College of Architecture and Landscape Architecture
Professor Corky Poster; Students Erika Green, Nadia Pischansky, Thomas Thivener
Renter-Occupied Housing

University Area Renter-Occupied Housing
(percentage by neighborhood)

- City of Tucson: 46.60%
- North University: 92.34%
- West University: 79.85%
- University of Arizona Main Campus: 85.39%
- Rincon Heights: 85.94%
- Iron Horse: 91.53%
- Pie Allen: 91.53%
- North University: 49.55%
- Jefferson Park: 19.84%
- Northwest: 56.59%
- Feldman's: 77.00%
- El Cortez: 16.05%
- Catalina Vista: 42.55%
- Blenman-Elm: 42.55%

Data Source: 2000 US Census Pima County DOT
Map: Derek Eysenbach, Arizona Institute, March, 2005
Site 1: 8th/Highland

Neighborhood Context

- Mansfield Middle School
- Recreational Center
- University House
- Public Land
- Residential
- Academic Land
Site 1: 8th/Highland

Sensory

View looking West from East of site
Site Plan

Site 1: 8th/Highland

Driveway

Mountain

Highland

8th Street
Final Proposal
for Single Family Housing
Single Story Detached Dwelling
Final Proposal for Single Family Housing

Site 1: 8th/Highland

Single Story Detached Dwelling
Site 1: 8th/Highland

Final Proposal
for Single Family Housing

Rowhouse

First Floor Plan

Second Floor Plan
Site 2: Fremont/Adams
North University Neighborhood

Site 2: Fremont/Adams

Project Site

Speedway

Park

Mountain
Site 2: Fremont/Adams

Site Features

View of south-east corner of site

View of south-west corner of site
Site 2: Fremont/Adams

Potential Site Design
Site 3: 6th Street/Granada
Site 3: 6th Street/Granada

Neighborhood Context
Ownership Model #2

Community Land Trust

a non-profit corporation created to acquire and hold land to provide affordable housing ensuring continued access to the land

Source: Institute for Community Economics, www.iceclt.org
Community Land Trust

- Separates land ownership from home ownership
- Keeps housing affordable by removing land from the speculative market
- Owner pays mortgage on the house & rent on the land
Our Next Steps:

• Elaborate Site designs for Rincon and North University
• Develop site designs 6th Street/Granada
• Further research
  – housing models
  – needs of the Tucson and University communities
City of South Tucson Affordable Housing Preservation Plan

Drachman Institute

HUD - Community Outreach Partnership Center
College of Architecture & Landscape Architecture
University of Arizona
Characteristics of Gentrification

- Physical upgrading of the neighborhoods particularly of housing stock.
- Displacement of original residents.
- Change in neighborhood character.
Changes in white, College graduate, 25-35 years population 1990-2000

(Bachelor, Master or PhD)

- Less than 0%
- 1-5%
- 6-10%
- 11-15%
- □ 15% and more

Source: 2000, 1990 US Census
Differences in Person from Hispanic Origin 1990-2000

- Less than -20%
- -20 to -5%
- -4 to 0%
- 1 to 25%
- 25% and more

Source: 2000, 1990 US Census
CENTRAL GENTRIFIED AREAS

Menlo Park

Key Informants Synthesis