

WALKABLE EMPLOYMENT CENTERS

*Tim Rood, AICP
Principal City Designer, City of San Jose*

Urban Design Addresses:

SPUR – Getting to Great Design

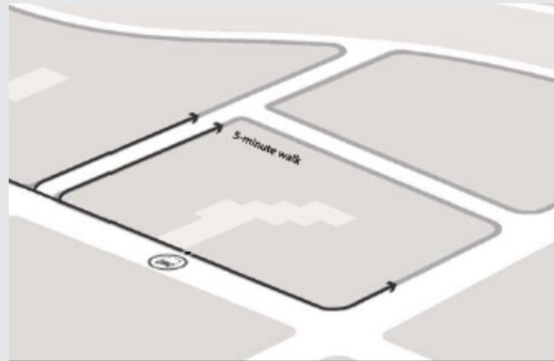
- The placement, orientation and form of **buildings**
- **Site planning**, or the physical arrangement of buildings and uses within development projects
- **Multiple scales**, from the human body to the neighborhood or district
- **Circulation and access** for all travel modes
- **Human experience**, activity, social interaction and travel behavior
- The arrangement and design of **streets and open spaces**
- The connection of buildings to the **public realm** and to one another
- Above all: the *integration* of all these things

SPUR, "Getting to Great Places"

DESIGN FOR WALKABILITY:

7 KEY COMPONENTS

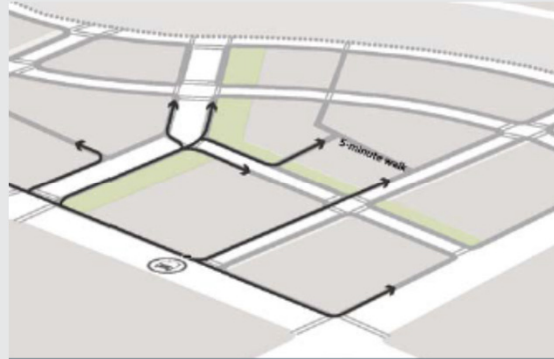
1. Create Fine-grained Pedestrian Circulation



Gensler



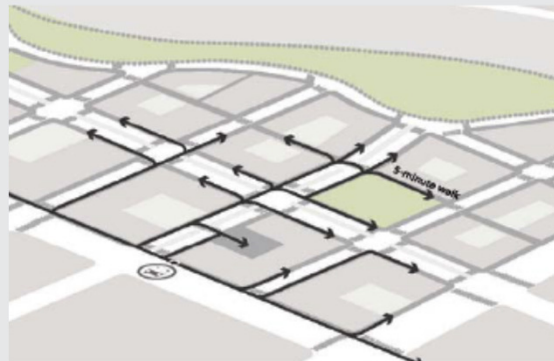
Sergio Ruiz



Gensler



Benjamin Grant



Gensler



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Block Structure



Network Analysis by CityID for OED


Block

North San Jose


Center: North First Street and West Trimble Street



3/4 mile x 3/4 mile

 WALK SCORE
38 out of 100

 TRANSIT STOPS
3
3 light rail


 EMPLOYEE DRIVE ALONE RATE
84%
County Rate: **77%**


Soma


Center: Fourth Street and Harrison Street



3/4 mile x 3/4 mile

 WALK SCORE
95 out of 100

 TRANSIT STOPS
75
5 regional rail, **70** high frequency bus serving 36 routes


 EMPLOYEE DRIVE ALONE RATE
35%
County Rate: **36%**


Downtown San Jose


Center: West San Fernando Street and South Almaden Boulevard



3/4 mile x 3/4 mile

 WALK SCORE
93 out of 100

 TRANSIT STOPS
38
3 regional rail, **7** light rail, **28** high frequency bus serving 8 routes

 EMPLOYEE DRIVE ALONE RATE
76%
County Rate: **77%**

2. Orient Buildings to Streets and Open Space

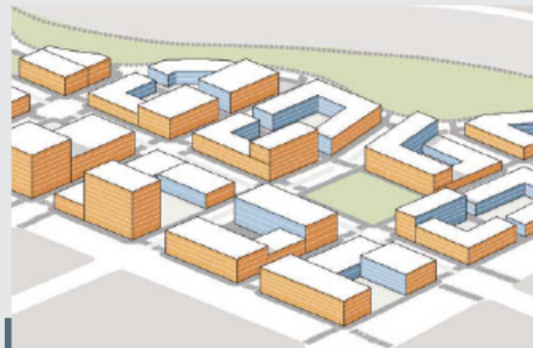
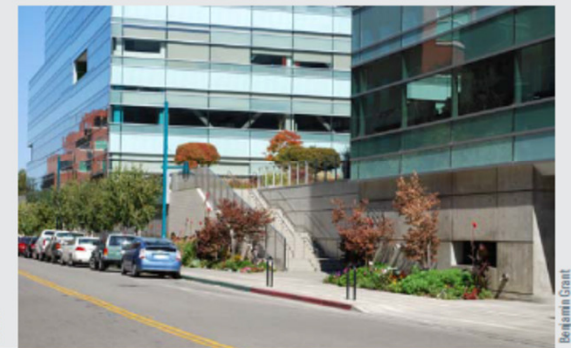
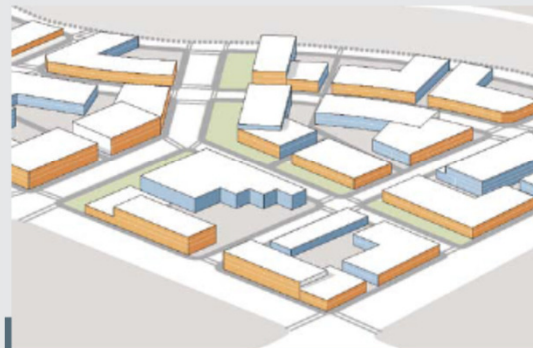
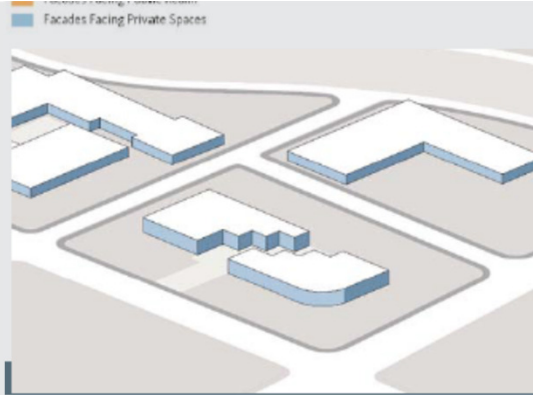



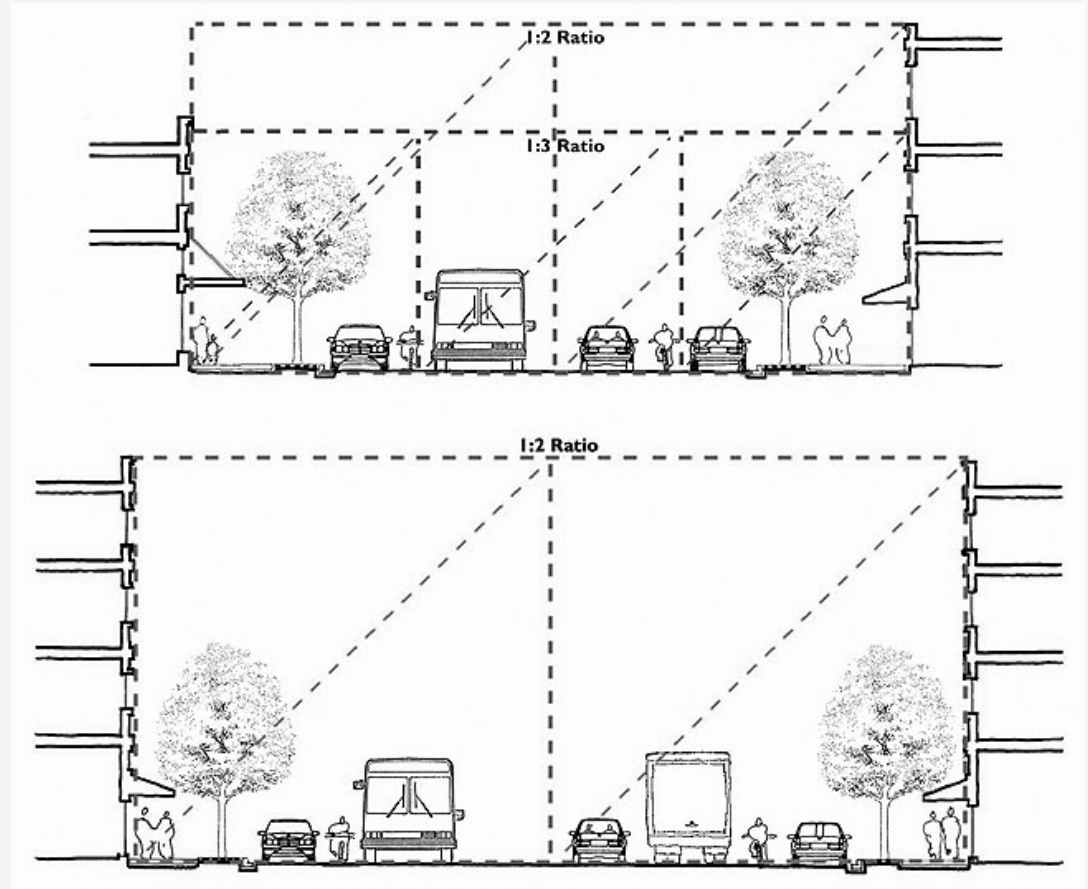
Figure-Ground



Network Analysis by CityID for OED

 Building

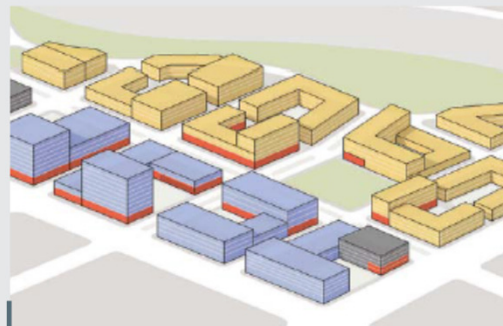
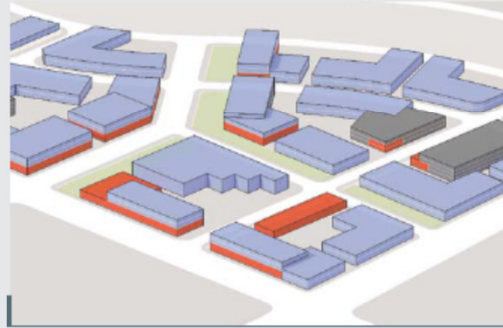
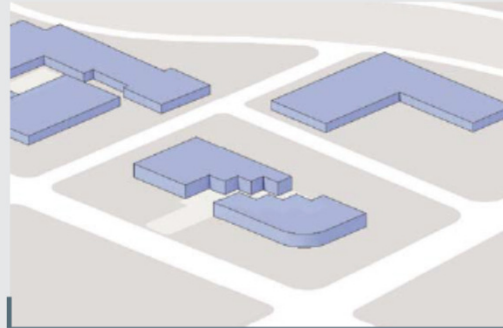
Sense of Enclosure



3. Organize Uses to Support Public Activity



- Office
- Retail
- Residential
- Parking
- Public Open Space



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Landscape Architecture Foundation

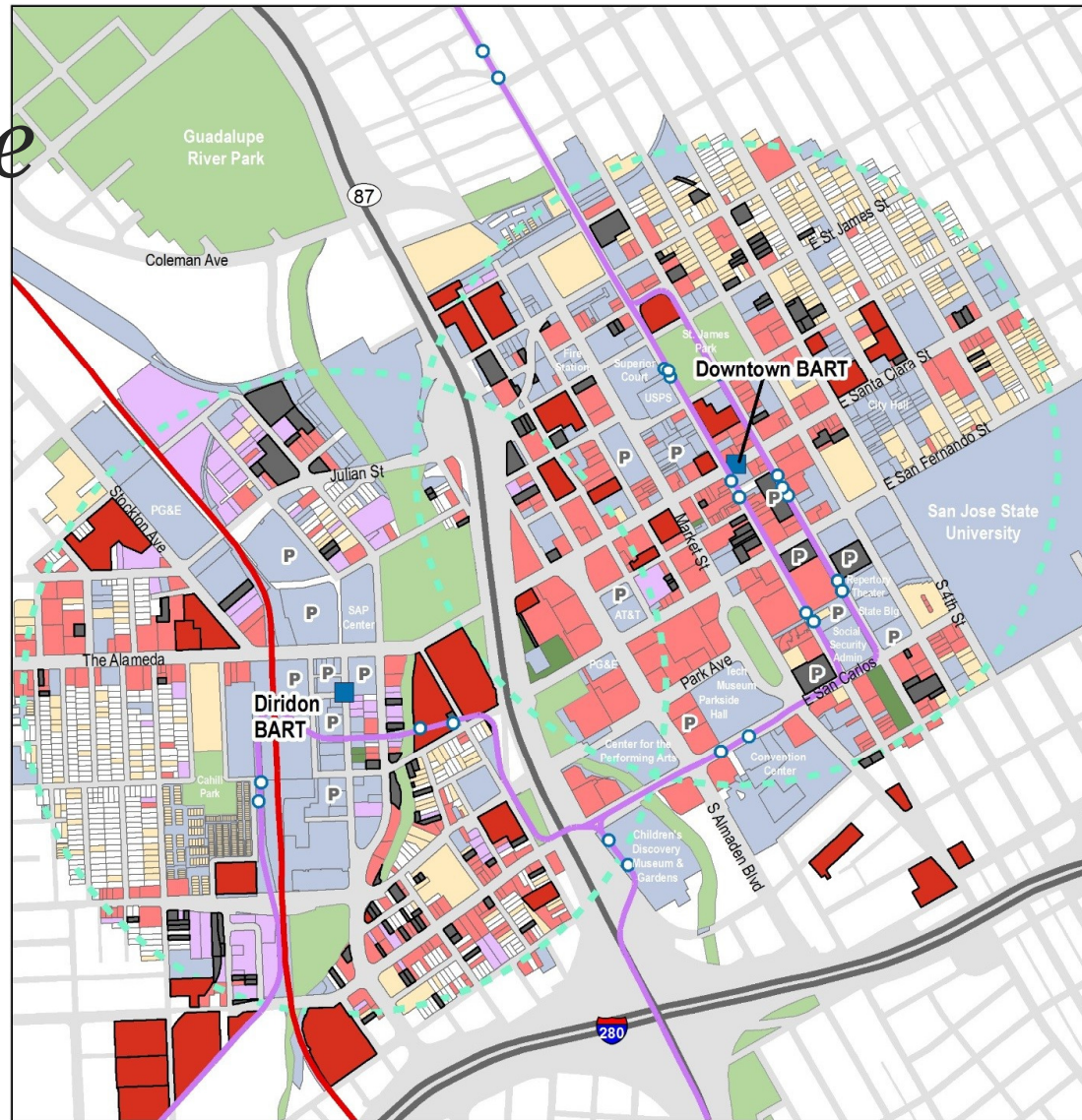
Mixed Use



Benefits of mixed use:

- **Encourages walking and bicycling** for short/local trips, by placing different uses within walking distance (home to work, home to shop, work to lunch/errands, etc.)
- **Supports transit** if worker-serving amenities provided within walking distance of transit-served workplaces
- **Supports public life** by bringing people out of buildings and onto streets
- **Increases safety** by creating activity throughout the day and evening
- **Supports economic development** by providing daytime and evening/nighttime customers for businesses

Mixed Use



Current Land Use

- Major Development Projects*
- Vacant (Privately Owned)**
- Public/Quasi-Public
- Single Family
- Multifamily/Other Residential
- Commercial (Office/Retail)
- Industrial, Warehouse, Utilities
- Commercial Open Space
- Open Space, Park & Habitat
- Half Mile Radius
- Proposed BART Station
- VTA Stations
- VTA Light Rail
- Caltrain

*Major residential, commercial, and industrial projects (pending, approved, completed, and under construction between 2008-2015).

**Privately owned vacant parcels have an improvement to land value ratio of 0.

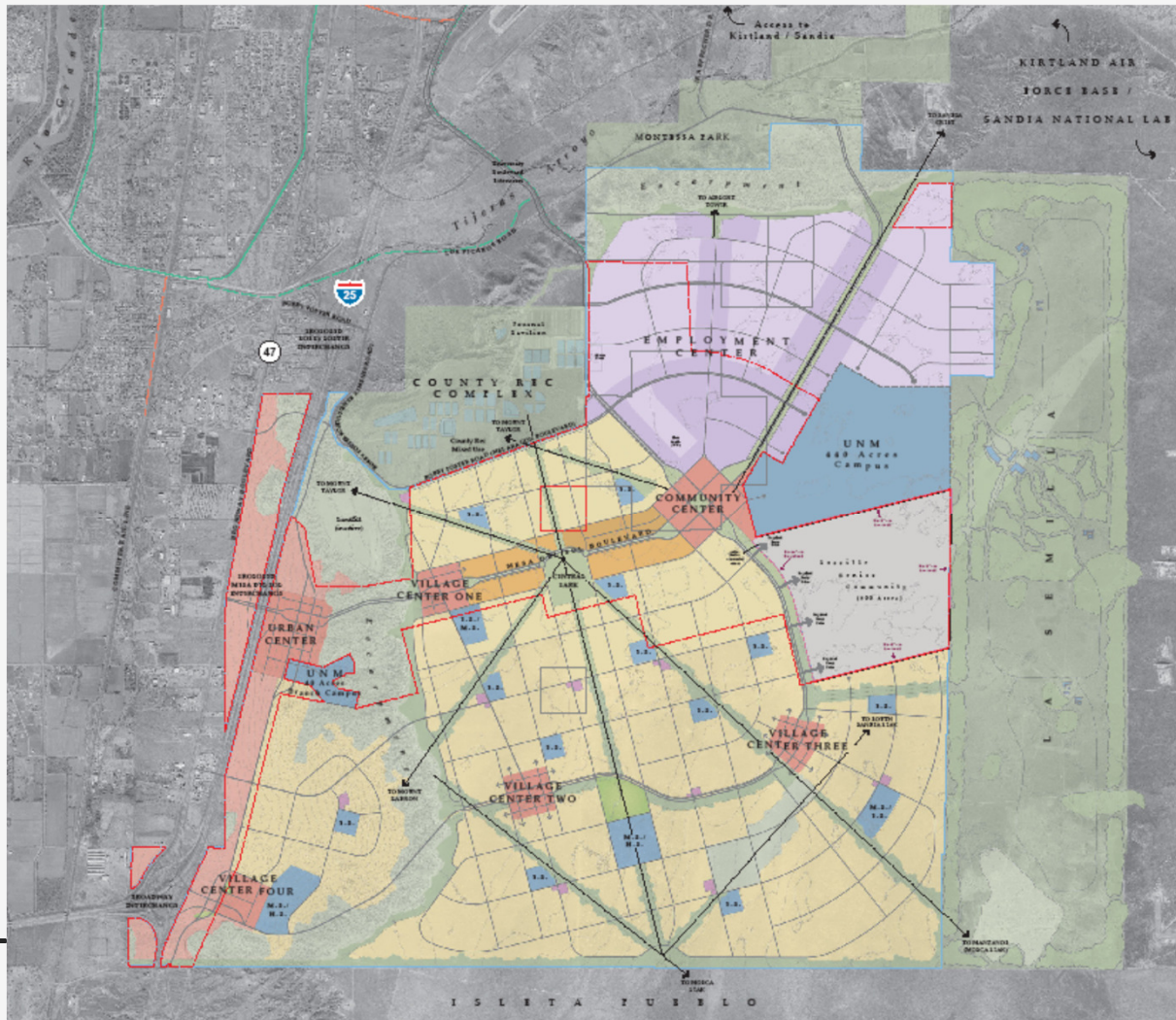
Source: Santa Clara County Assessor, 2015; City of San Jose, 2016; Strategic Economics, 2016.



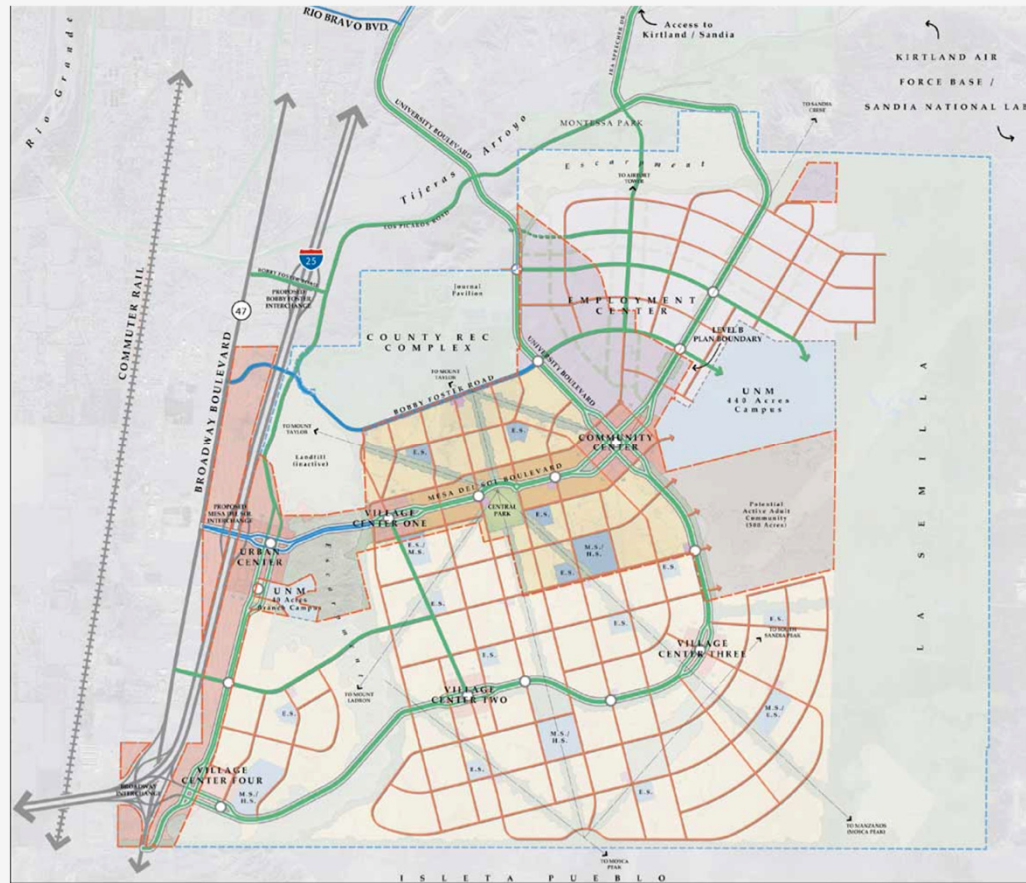
Mesa del Sol, Albuquerque



Overall Master Plan



Auto and Transit Circulation Network



**AUTO & TRANSIT
CIRCULATION
BUILD-OUT NETWORK**
Figure 3-1

Legend

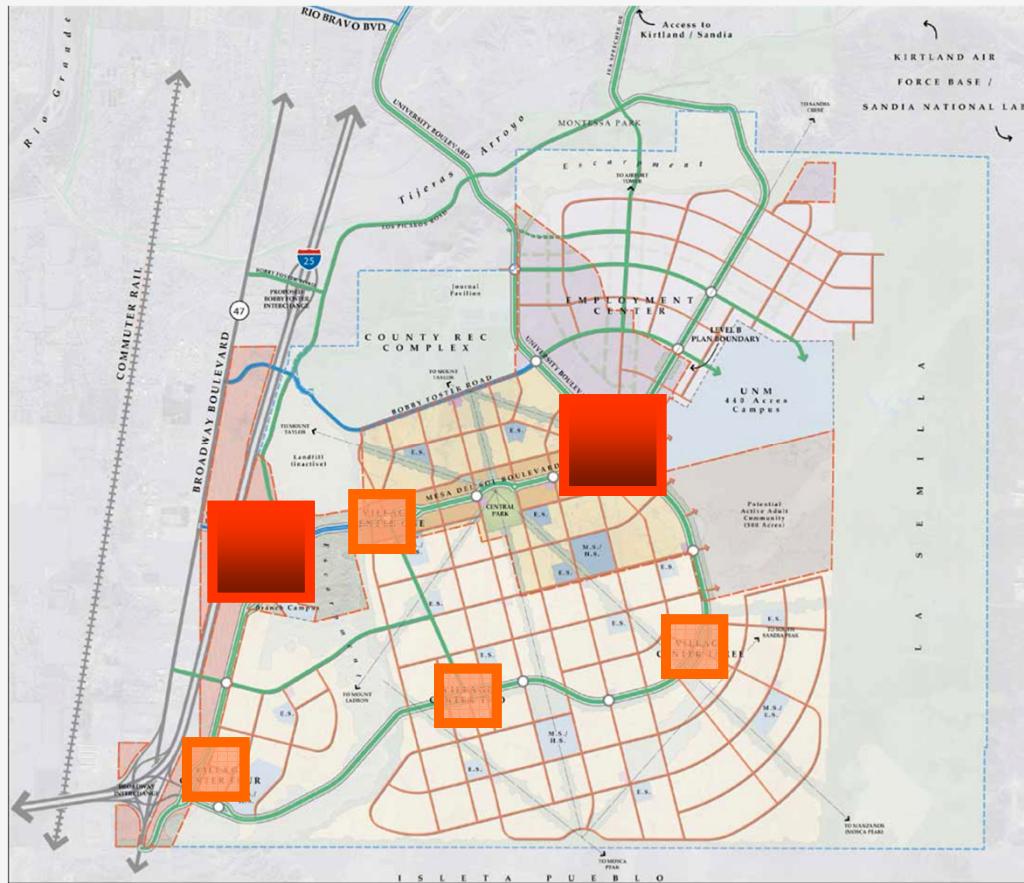
- Primary Transit Nodes
- Trunk Transit Routes
- Primary Roadways
(Boulevards and Avenues)**
- 2 or 3 Lanes Each Direction
- 2 Lanes Each Direction
- Connector Roads (*specific configurations to be assigned at a more detailed planning level*)

Note:

These road configurations and lane totals are preliminary. The final transportation study will dictate actual laneage. Some roadways may have phased construction.



Mixed-Use Centers



**AUTO & TRANSIT
CIRCULATION
BUILD-OUT NETWORK**
Figure 3-1

Legend

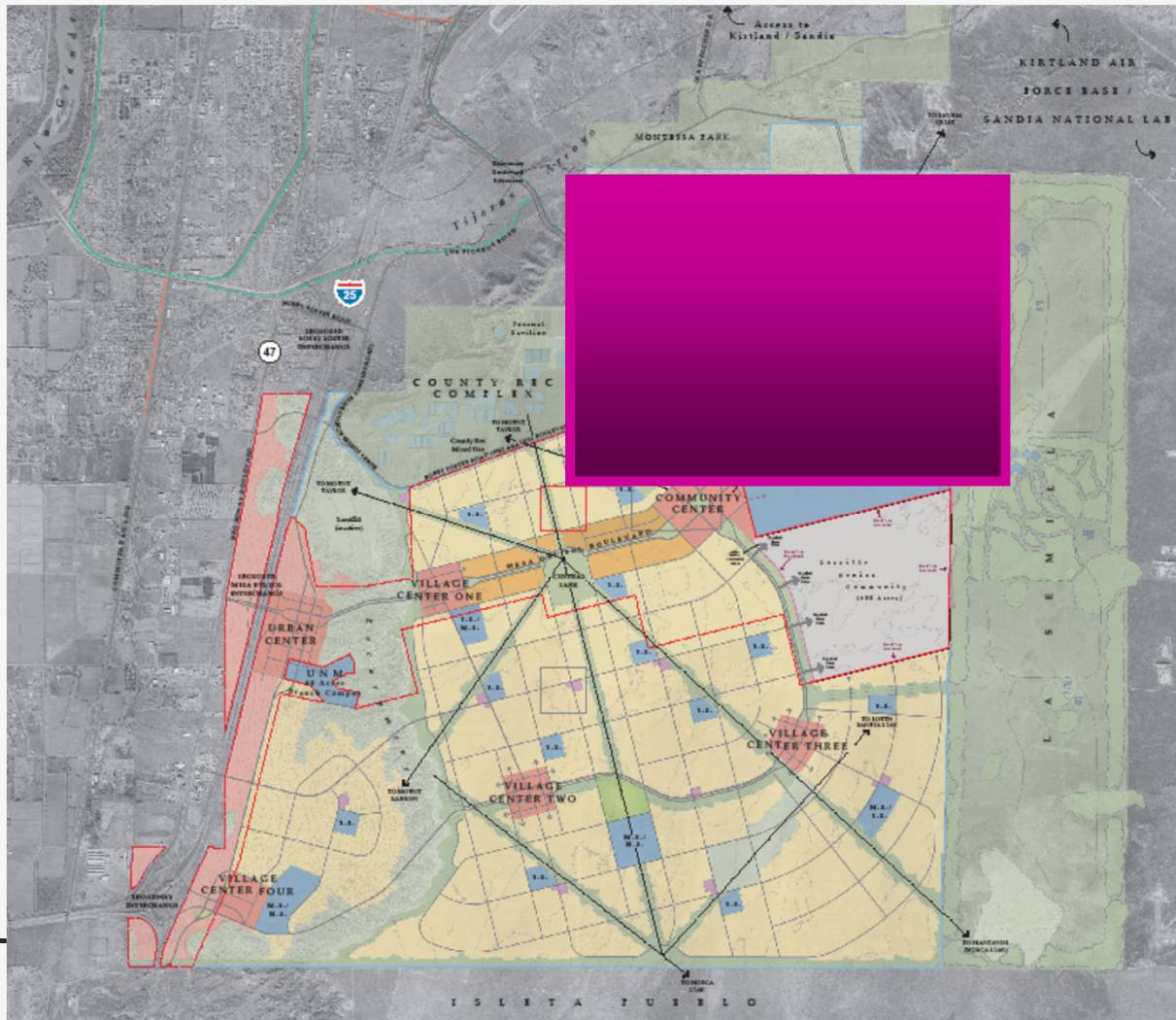
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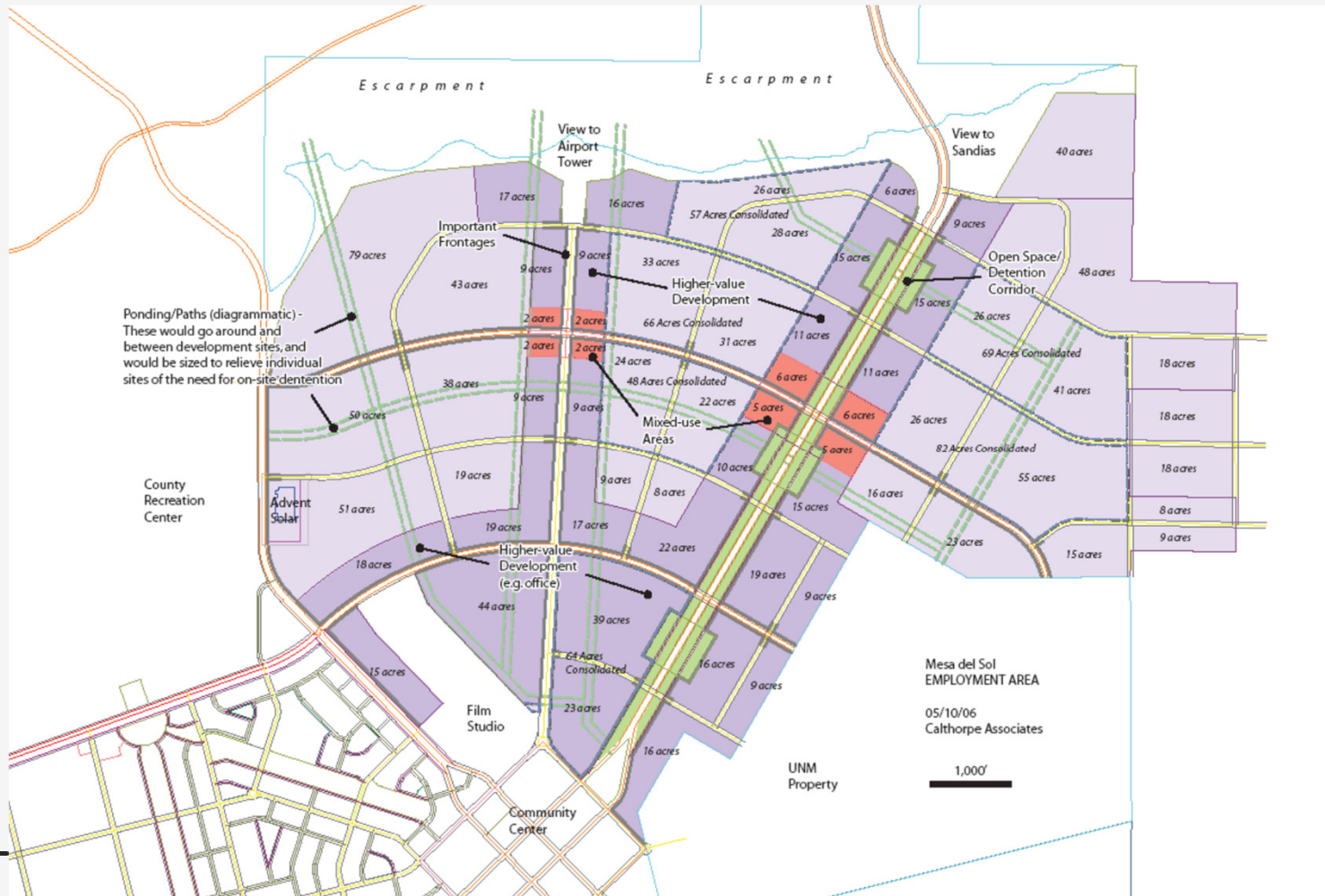
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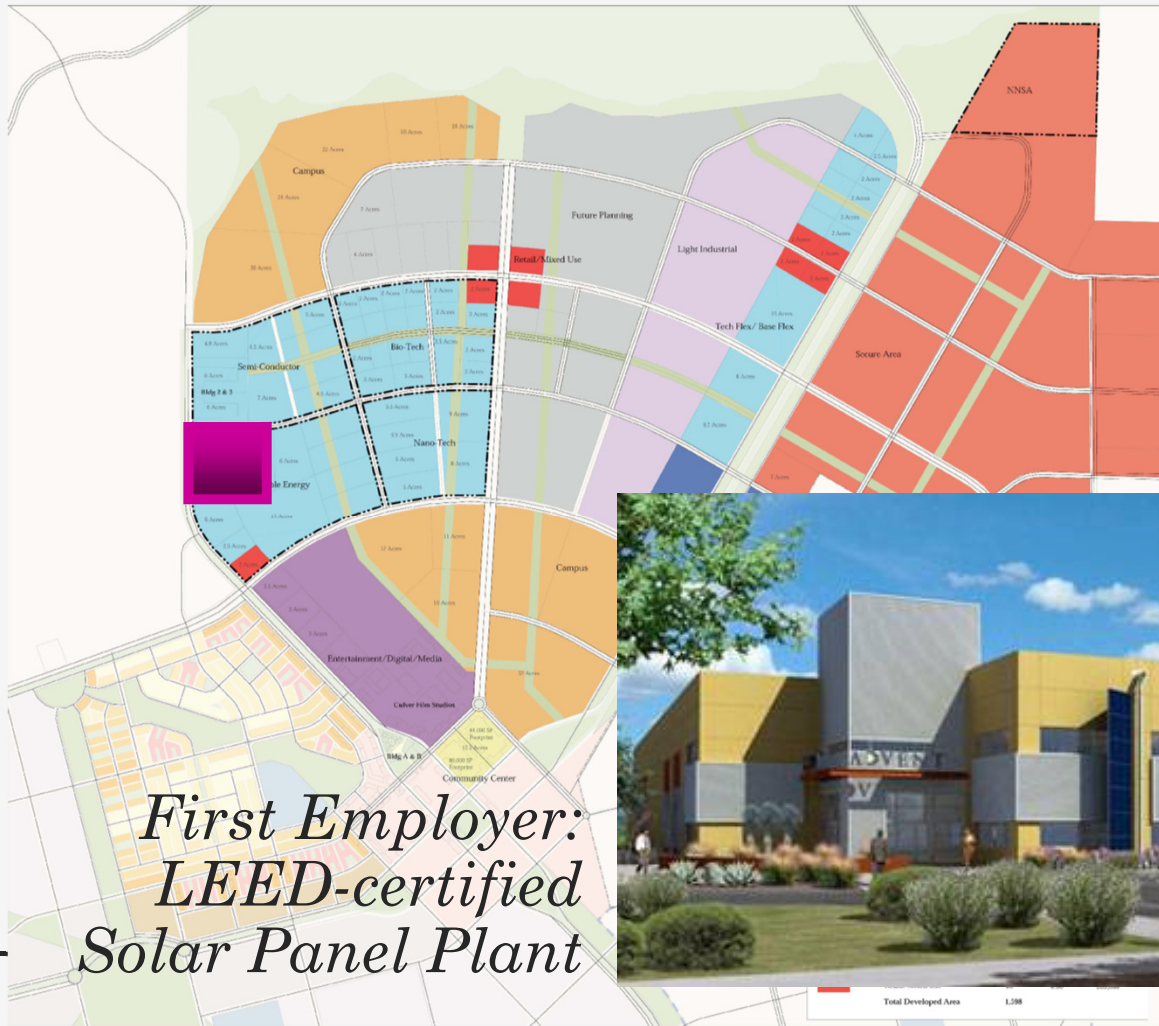
Regional Employment Center – 1,500 acres, 9MSF



Employment Center Showing Mixed-Use Nodes



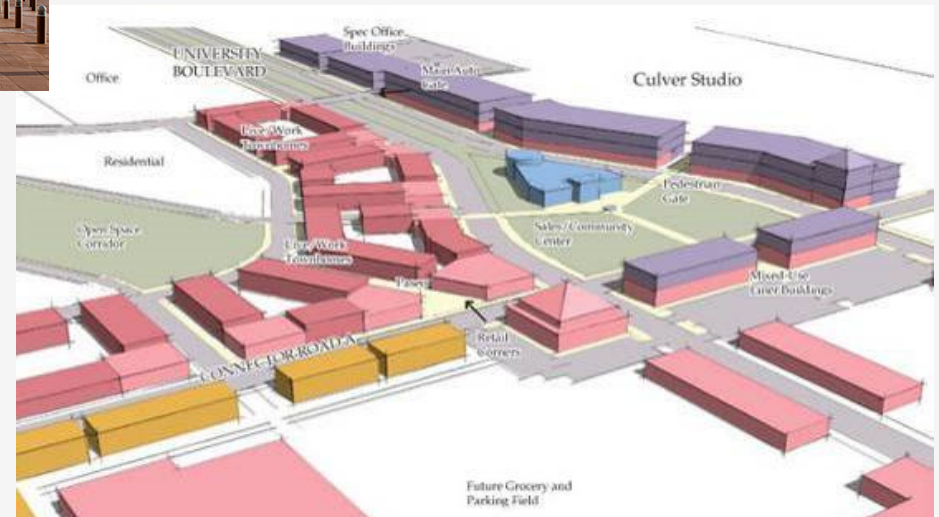
Employment Center Showing Industry Clusters



*First Employer:
LEED-certified
Solar Panel Plant*



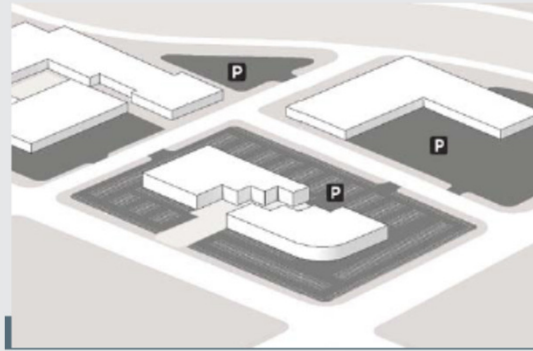
Community Center Showing Connections to Employment



4. Place Parking Behind or Below Buildings



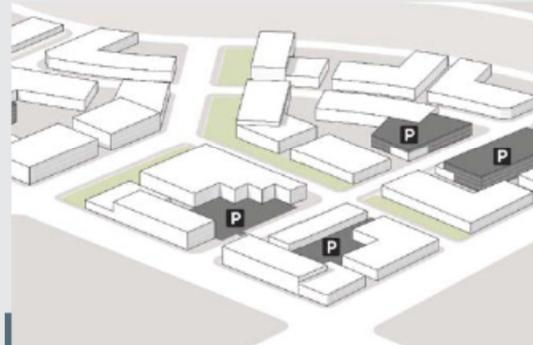
P Above Ground Parking
P Underground Parking



Genster



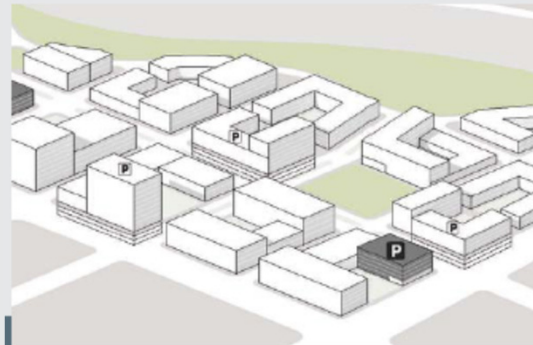
Sergio Ruiz



Genster



Benjamin Grant



Genster



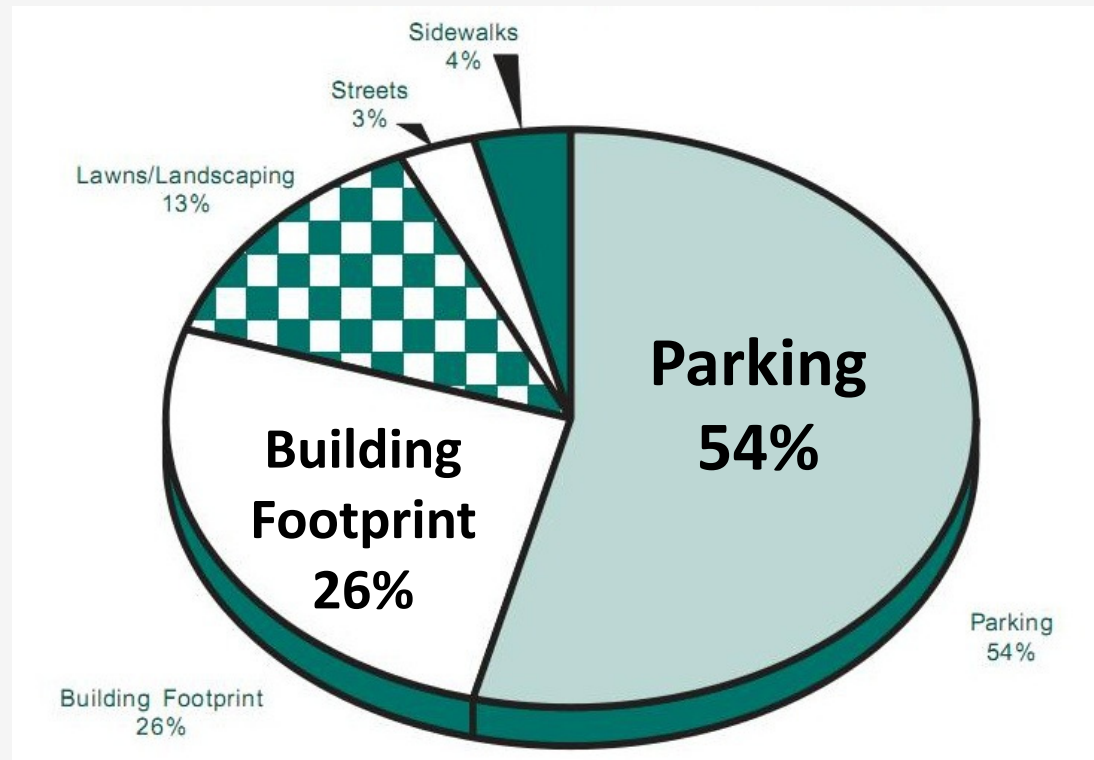
Benjamin Grant





Parking between the sidewalk and buildings is not pedestrian friendly

Site Coverage for Typical Commercial Development



Averages for Olympia, WA

Site Organization

- Building placement
 - Compactness of buildings facilitates walking
 - Higher activity uses should be closest to transit stops
 - Orient major uses towards transit streets
 - Locate complementary uses together to assist in trip chaining
 - Adjacent street network provides connectivity
-

Bring Buildings Closer to the Street

- Creates a street where drivers know to expect pedestrians



Cascade Station, Portland



Cascade Station, Portland



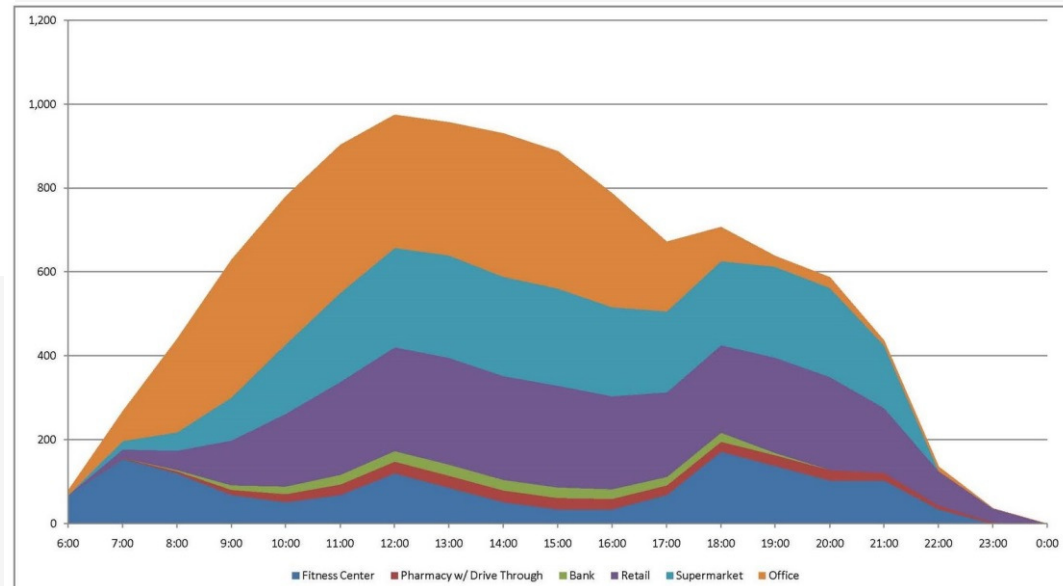
NE Cascades Pkwy, Portland, OR
97220



Parking Policies for Site Design

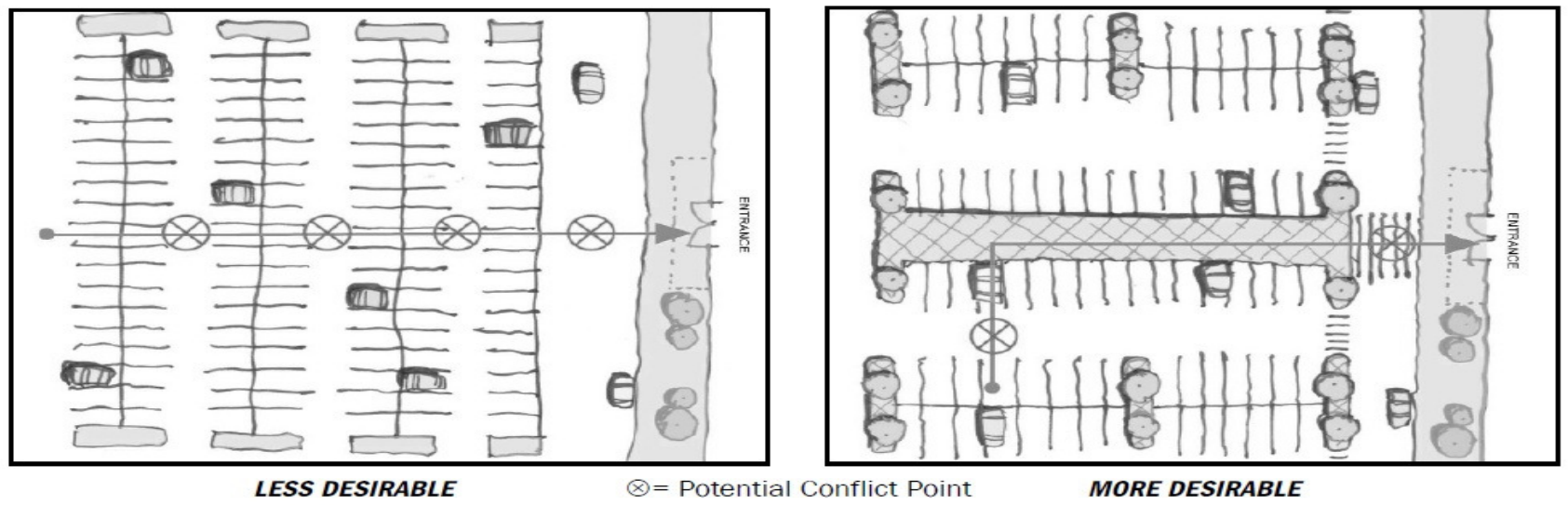
- Successful parking requirements consider:
 - Development type and size
 - Surrounding land use mix
 - Development density and design
 - Demographics
 - Availability of transportation choices
 - Off-site parking
-

Shared Parking Policy



Parking

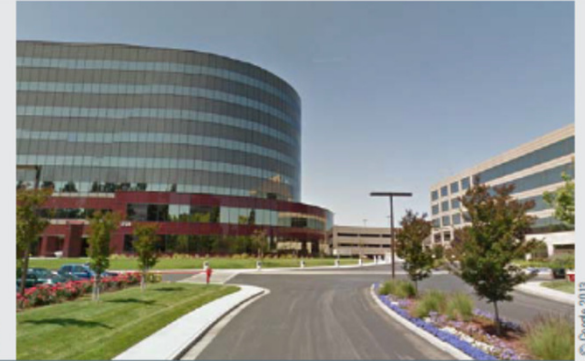
- Parking Access
 - Consolidate parking access points to minimize conflicts
 - Link parking areas to adjacent sites
 - Provide pedestrian walkways and refuges



*5. Address
the Human
Scale with
Building
and
Landscape
Details*



Consider



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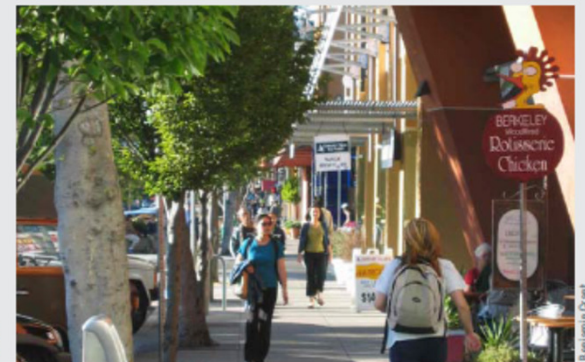
Consider



Bergmann Group



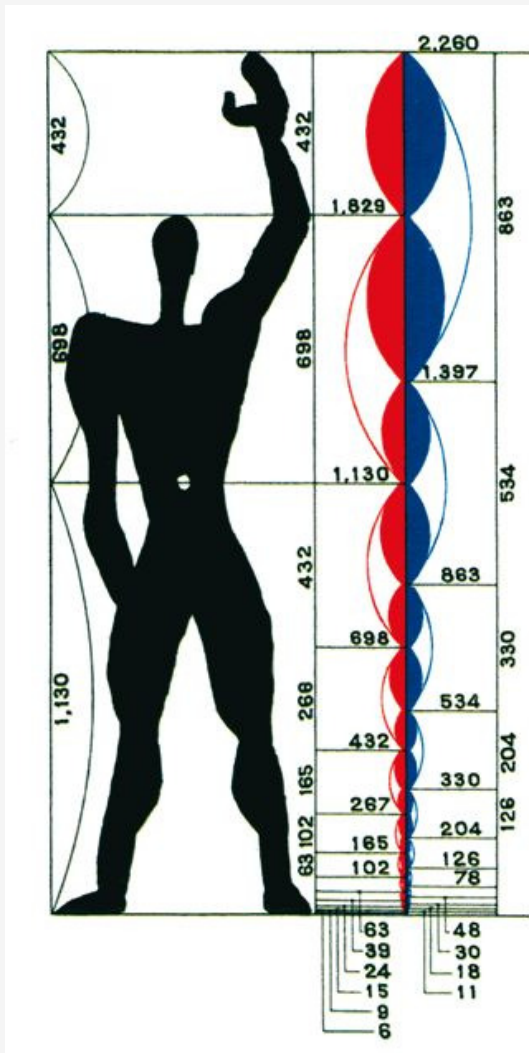
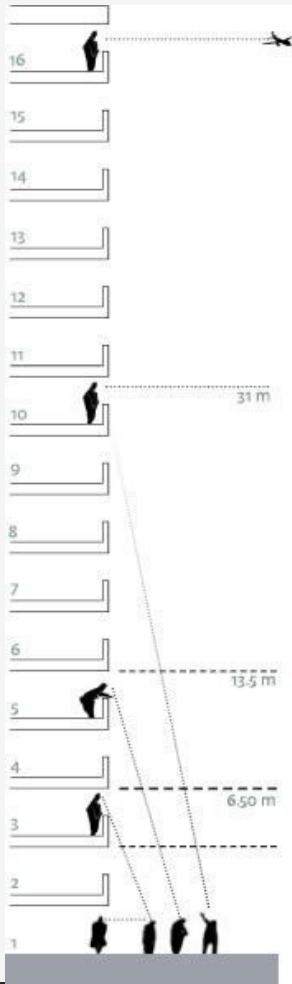
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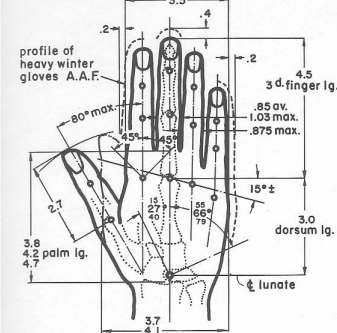


Human Scale

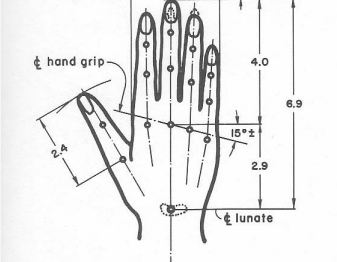


HAND MEASUREMENTS OF MEN, WOMEN AND CHILDREN

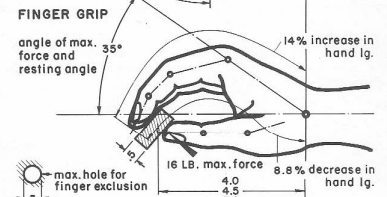
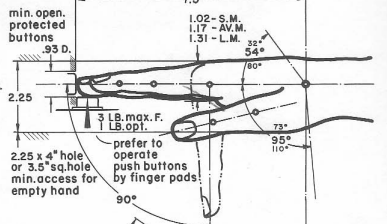
RIGHT HAND AV. MAN



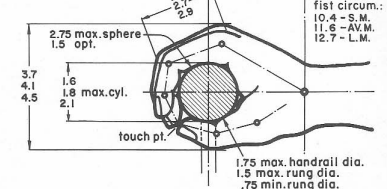
RIGHT HAND AV. WOMAN



HAND POSITIONS - AVERAGE MAN MAX. REACH



HAND GRASP



HAND DATA	MEN			WOMEN			CHILDREN			
	2.5% tile	50.% tile	97.5% tile	2.5% tile	50.% tile	97.5% tile	6 yr.	8 yr.	11 yr.	14 yr.
hand length	6.8	7.5	8.2	6.2	6.9	7.5	5.1	5.6	6.3	7.0
hand breadth	3.2	3.5	3.8	2.6	2.9	3.1	2.3	2.5	2.8	—
3 ^d finger lg.	4.0	4.5	5.0	3.6	4.0	4.4	2.9	3.2	3.5	4.0
dorsum lg.	2.8	3.0	3.2	2.6	2.9	3.1	2.2	2.4	2.8	3.0
thumb length	2.4	2.7	3.0	2.2	2.4	2.6	1.8	2.0	2.2	2.4

*Count the
Human-
Scaled
Elements of
this Scene*



*Count the
Human-
Scaled
Elements of
this Scene*





*Count the
Human-
Scaled
Elements of
this Scene*



6. Provide Clear, Continuous Pedestrian Access



7. *Build Complete Streets*



Travel Behavior Affects Livability







