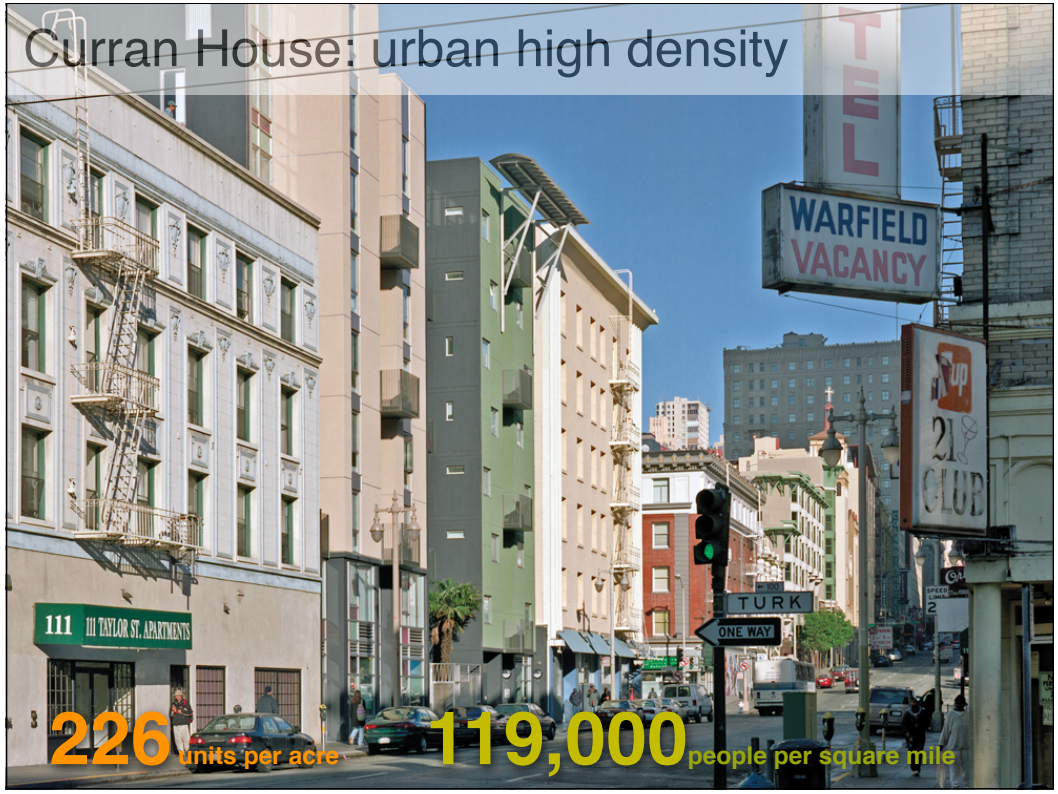
68 ft Buildings - why/what/how

SPUR 2011.11.28


the sylvan garden suburb ideal
5 units per acre
3,000 people per square mile

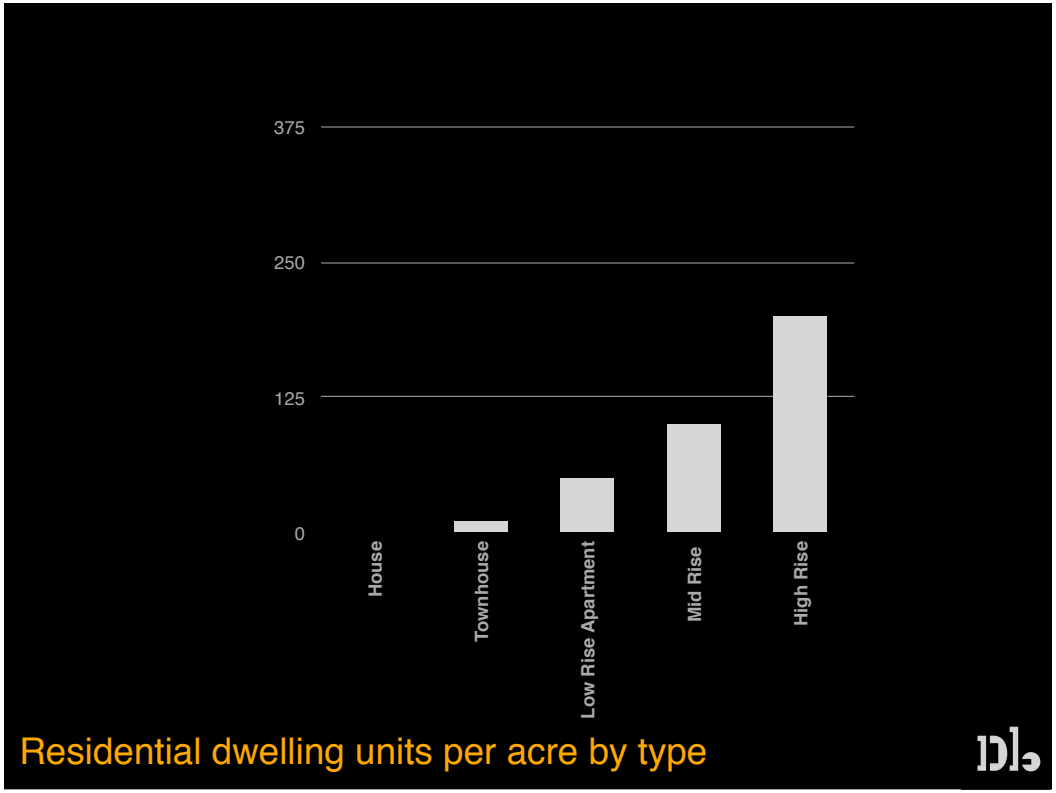
Curran House: urban high density



226 units per acre

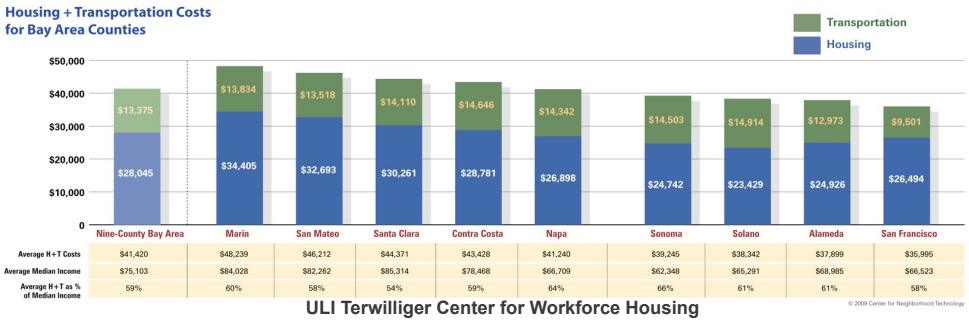
119,000 people per square mile


Oklahoma City
SF
100,000 people per square mile
Houston
20,000 people


375
250
125
0
House
Townhouse
Low Rise Apartment
Mid Rise
High Rise
Residential dwelling units per acre by type


300000
225000
150000
75000
0
House
Townhouse
Low Rise Apartment
Mid Rise
High Rise
People per Square Mile by housing type

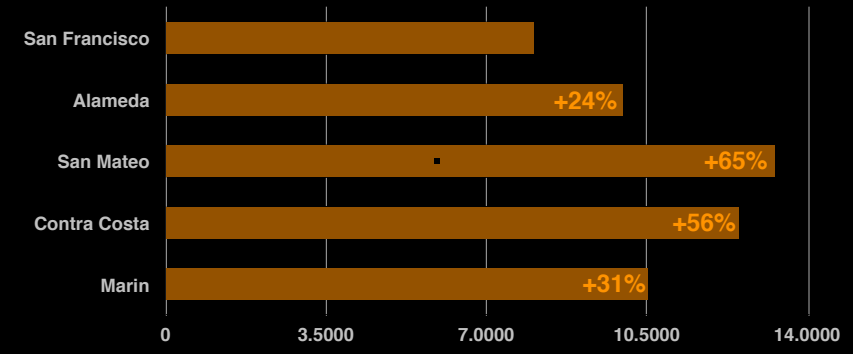
Why density?



ULI Terwilliger Center for Workforce Housing

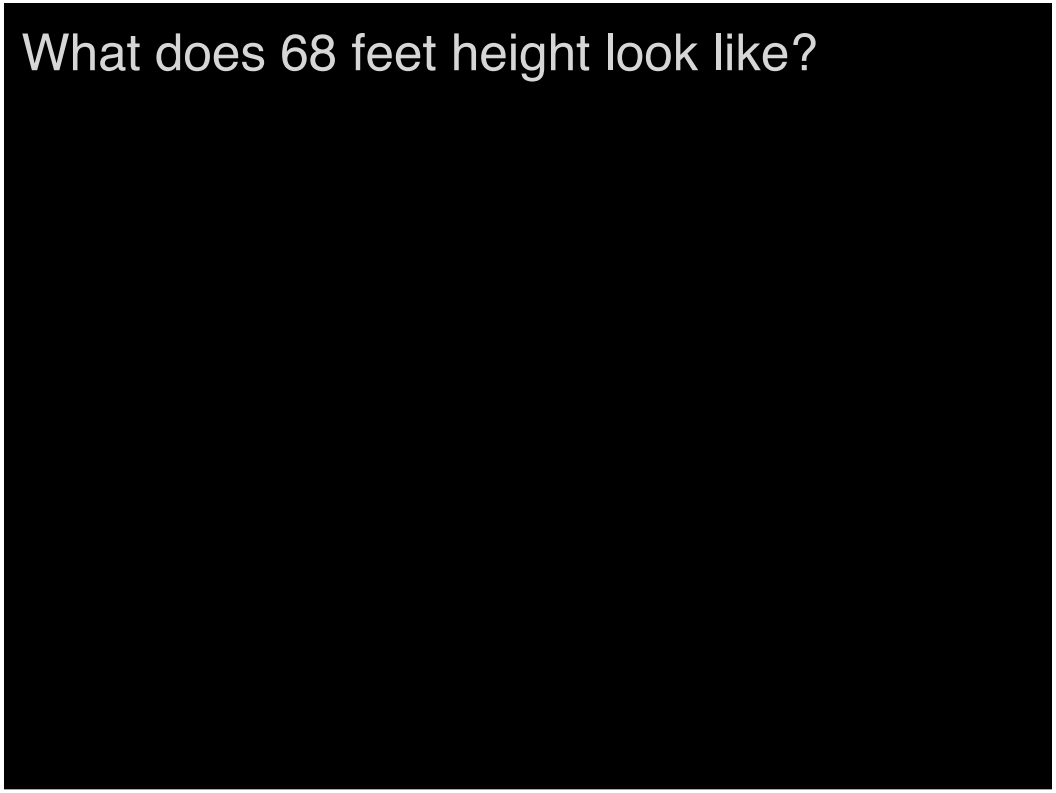
affordability

Bay Area by County: carbon



Metric tons carbon per citizen in tons for residential and transportation uses

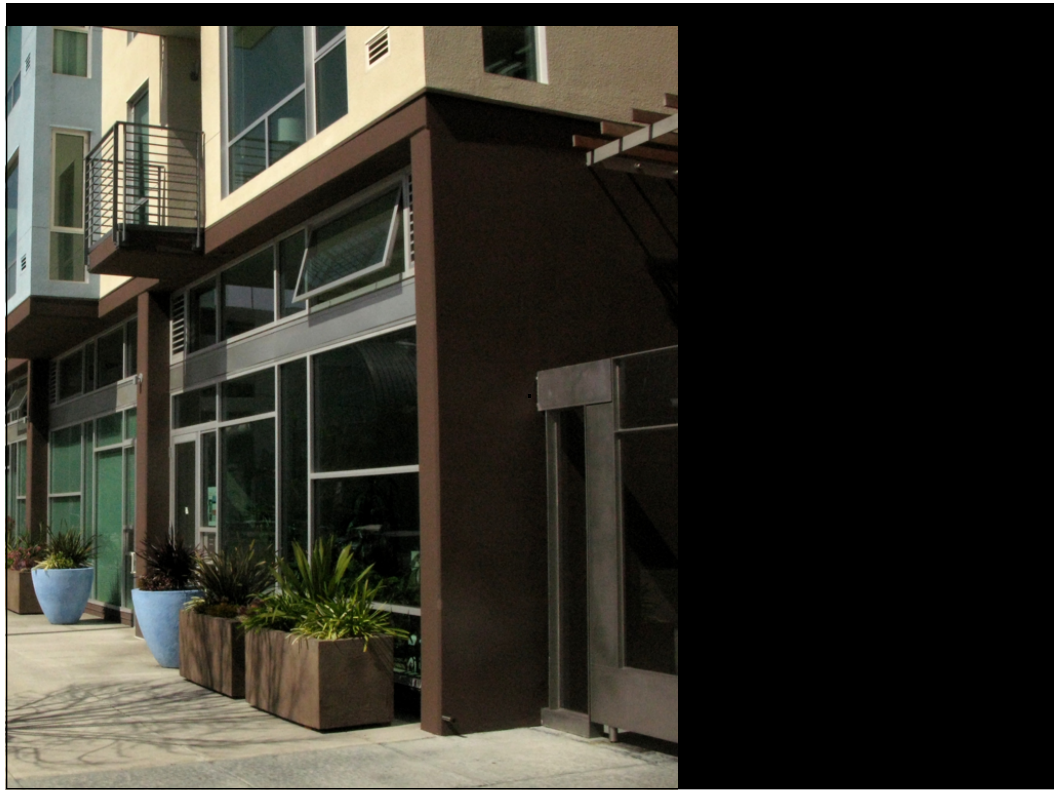
What does 68 feet height look like?



6 Story 200 Second Street, Jack London Square

148 units per acre

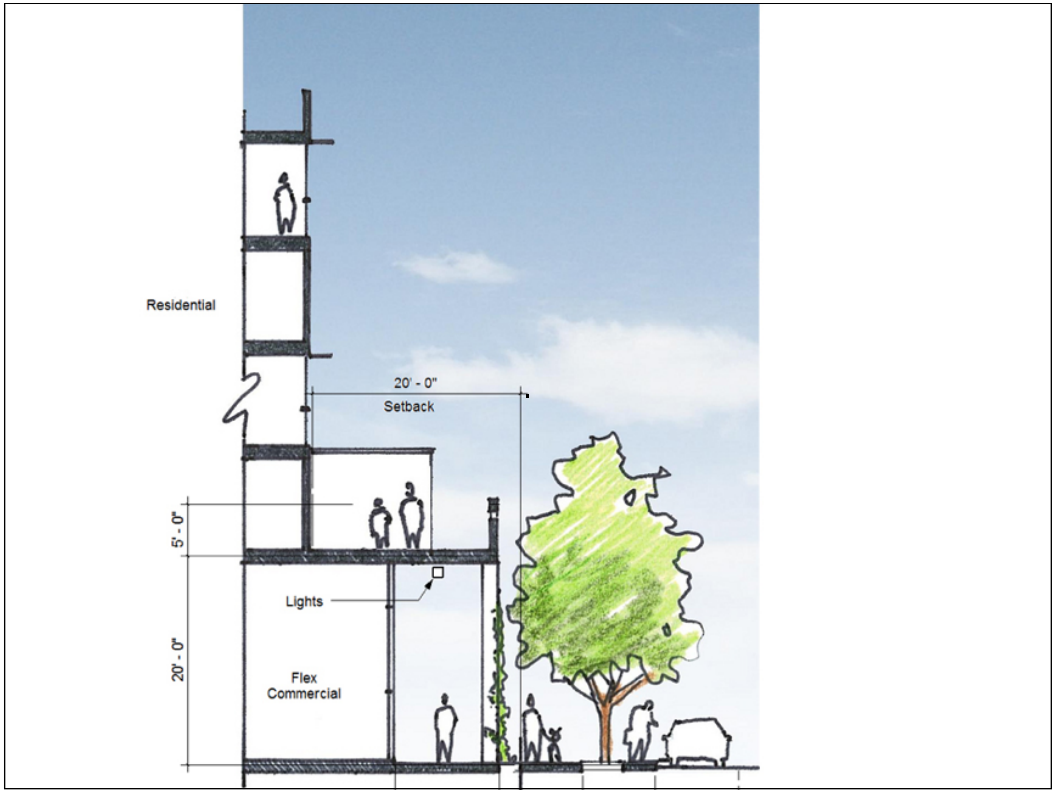
79,000 people per square mile

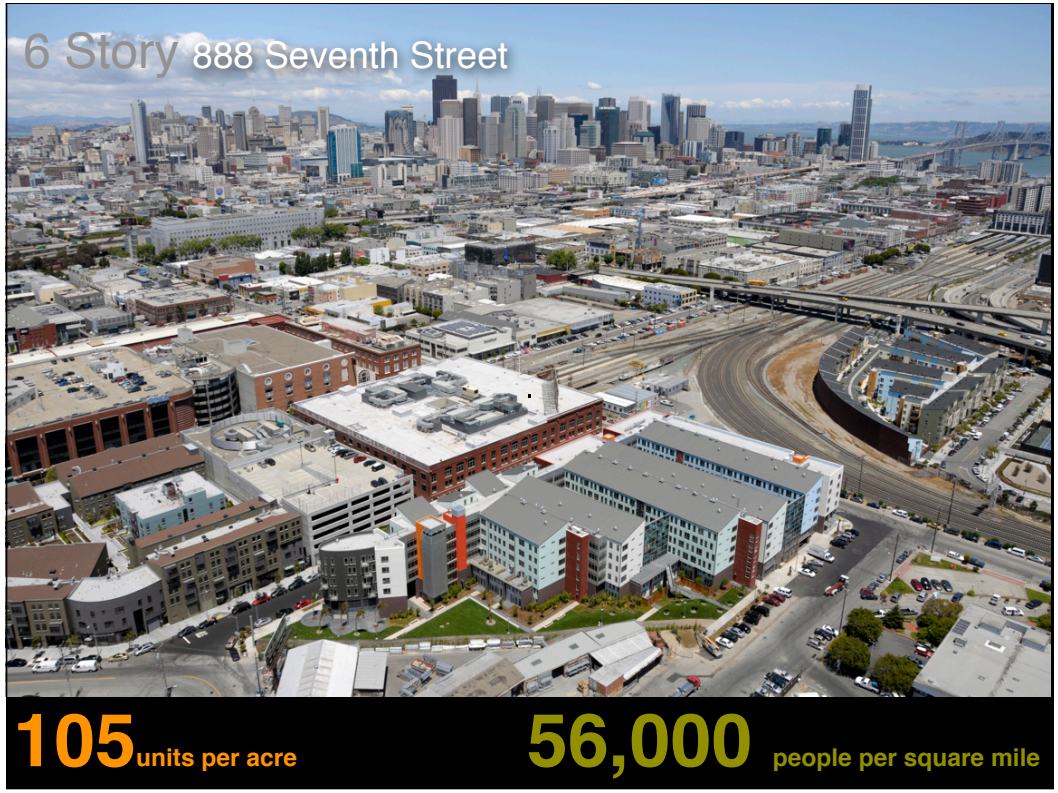



encuentro

73 units per acre

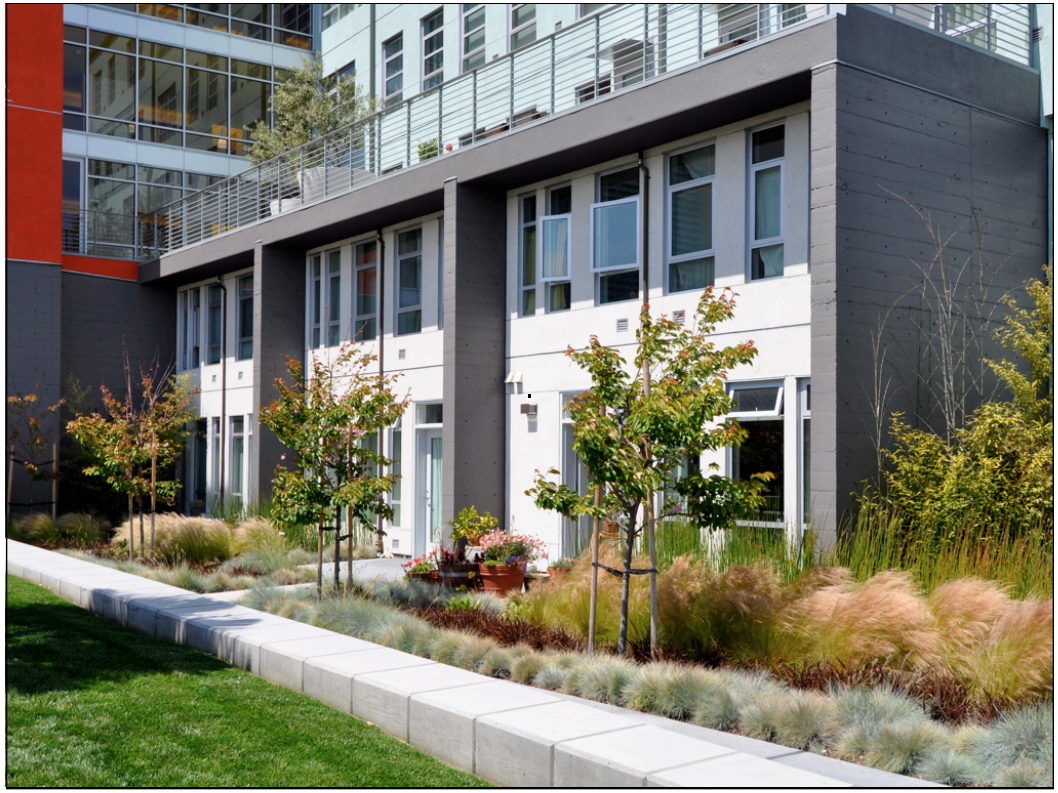
39,000 people per square mile


Residential
20' - 0"
Setback
5' - 0"
Lights
20' - 0"
Flex
Commercial


6 Story 888 Seventh Street
105 units per acre
56,000 people per square mile


KING STREET
SEVENTH STREET
BERRY STREET
MISSION CREEK BIKEWAY


88



Why Increased ground level ceiling heights

2004 SPUR paper

www.dbarchitect.com/ItsTheCeilingHeights

Why Increased ground level ceiling heights

68 ft Height allows an even better ground level height

Why Increased ground level ceiling heights

Higher ceiling heights at ground level, now mandated in some San Francisco districts under recent zoning:

Eastern Neighborhoods	14’ floor to ceiling
Urban Mixed Use (UMU)	18’ floor to ceiling

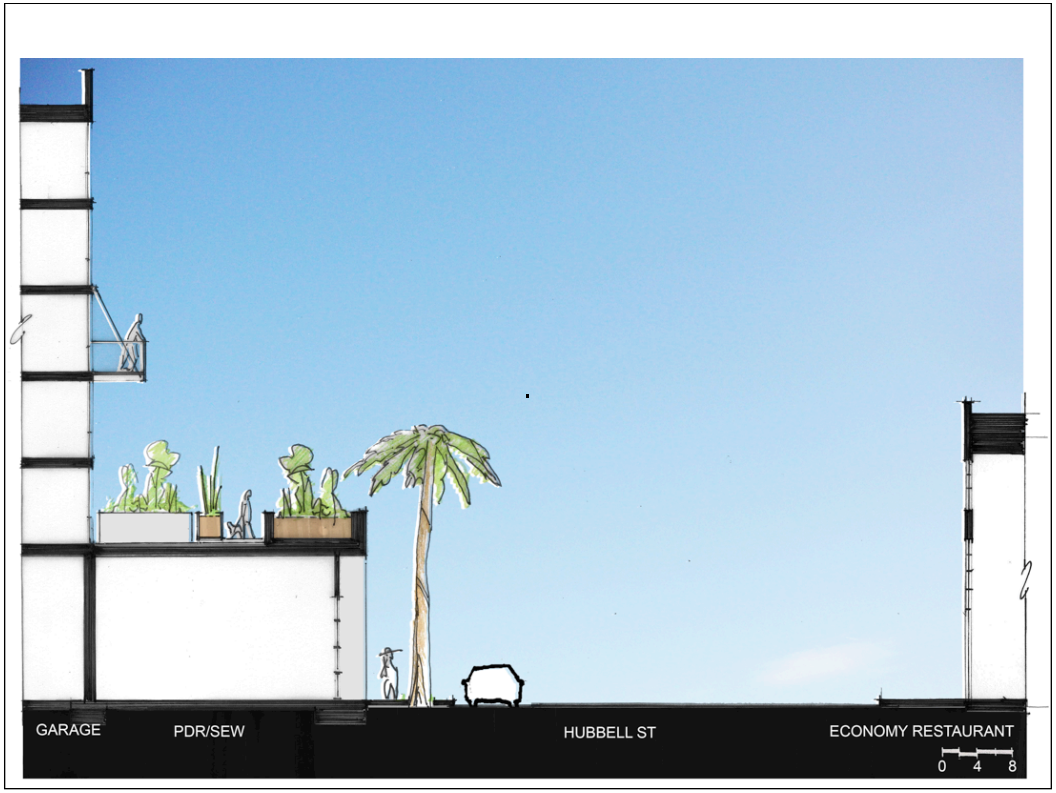
6 Story Daggett Place

99 units per acre

53,000 people per square mile


RESIDENTIAL
VERTICAL CIRCULATION
HORIZONTAL CIRCULATION
COMMON SPACE
SERVICE
GARAGE
RETAIL
PDR
PRODUCTION, DISTRIBUTION, REPAIR
HUBBELL STREET
7TH STREET
I-280
16TH STREET
CONNECTICUT STREET
MISSOURI STREET
NOORD
ZUID
0' 15' 30' 60' 120'
SCALE: 1"=30'


LOCALLY
MADE
188


GARAGE
PDR/SEW
HUBBELL ST
ECONOMY RESTAURANT
0 4 8


888
886

How

International Building Code - IBC

(replaced the UBC with advantages for this type of building)

How

TYPE III allows 85 ft maximum height but only 5 stories without bonus exception of Type I ground floor

Ground floor residential allowed under new code (used to only allow parking (!), then commercial was added)

How

TYPE III Construction (wood)

Allows a wood frame building taller than regular Type 5 wood framing.

How

TYPE III Construction (wood frame)

Main difference from Type V wood frame:

Exterior walls need to 2 hr, or 4 layers of gypsum board, 2 inside, 2 outside

How

TYPE III Construction (wood frame)

More expensive than Type V wood frame:
recent framing costs on Dbarchitect projects of $28 to $32 per SF for Type 3, about $5 more than Type 5 wood frame.

This seems to usually work for the cost feasibility.

How

TYPE III Construction (light steel frame)

Can be light steel framing at additional cost of about $5 over Type III wood with the advantage of lower mold potential.

Unclear if light steel version can be built at a reasonable schedule, lots of screws!

Why

Bottom Line:

1. Adds 20% more building to the same site

2. 6 story building at reasonable construction cost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