



Transit-Oriented Development

TOD projects have three fundamental characteristics that enhance transit ridership:

- § A mix of **moderate to high intensity land uses**
- § A **physical or functional connection to the transit system**
- § Design features that **reinforce pedestrian relationships and scale**



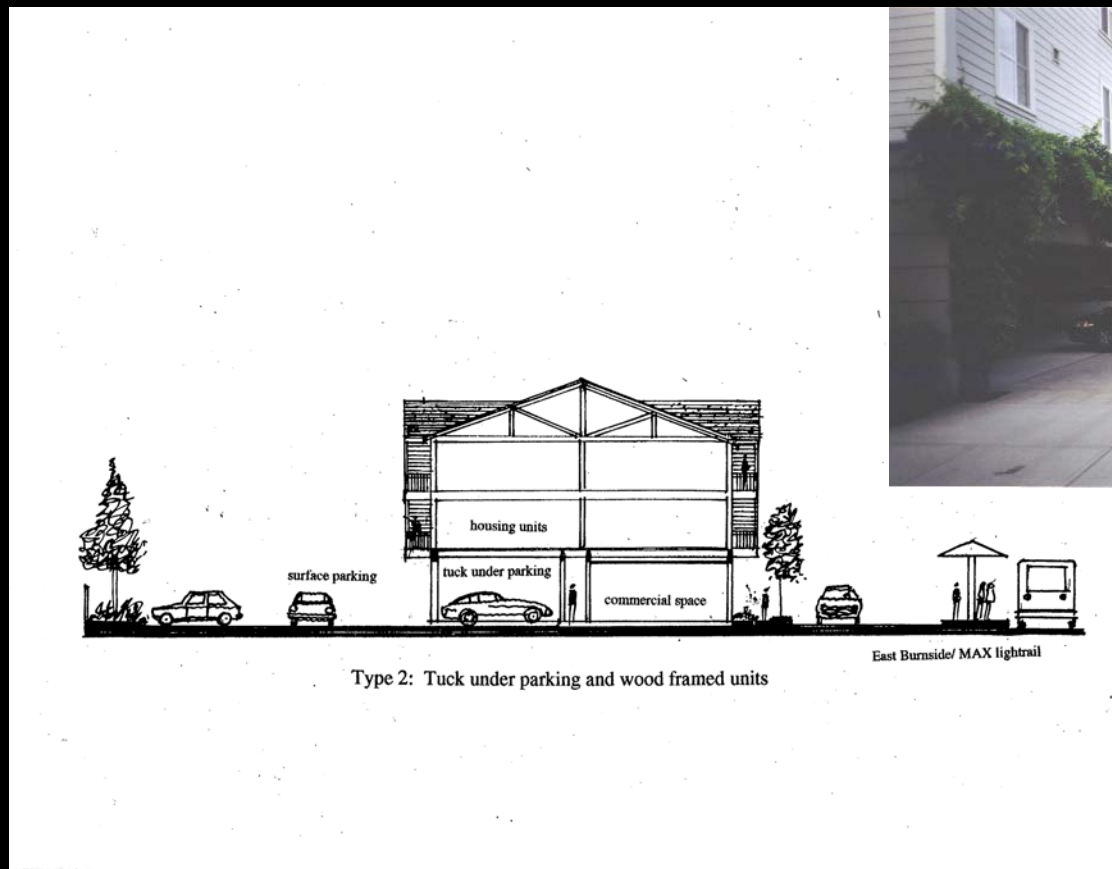
Two factors that most influence ridership: **density & proximity.**

Surface Parking - the deathstar of density



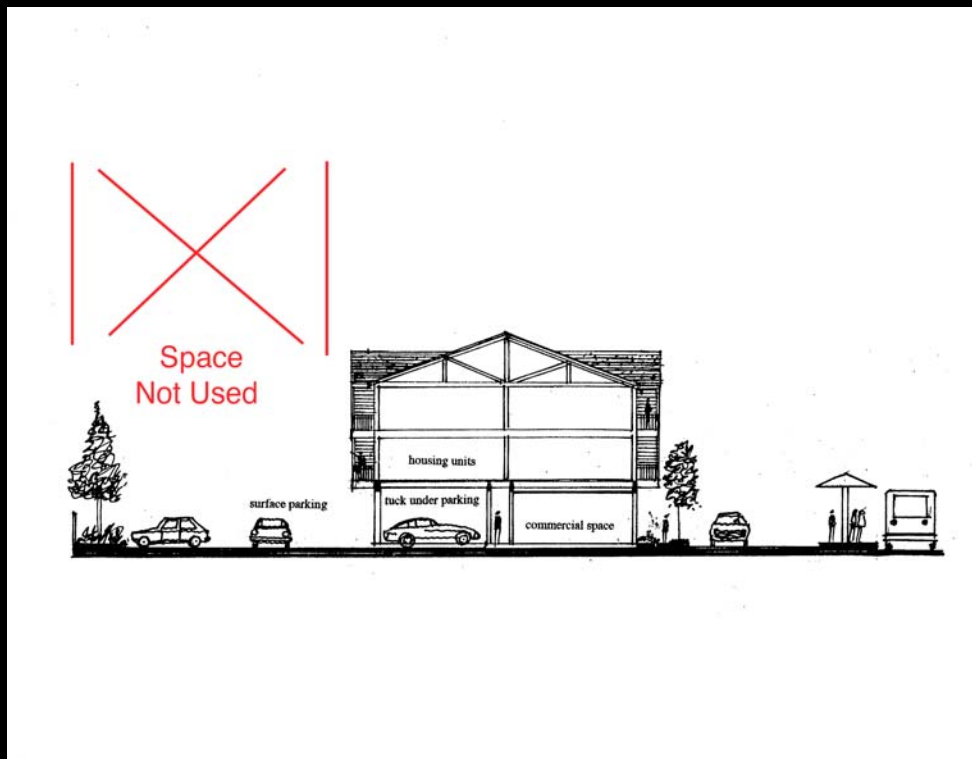
The Relationship between Density and Parking: Parking Type

Tuck Under



Buckman

Tuck Under



Least Expensive structured parking

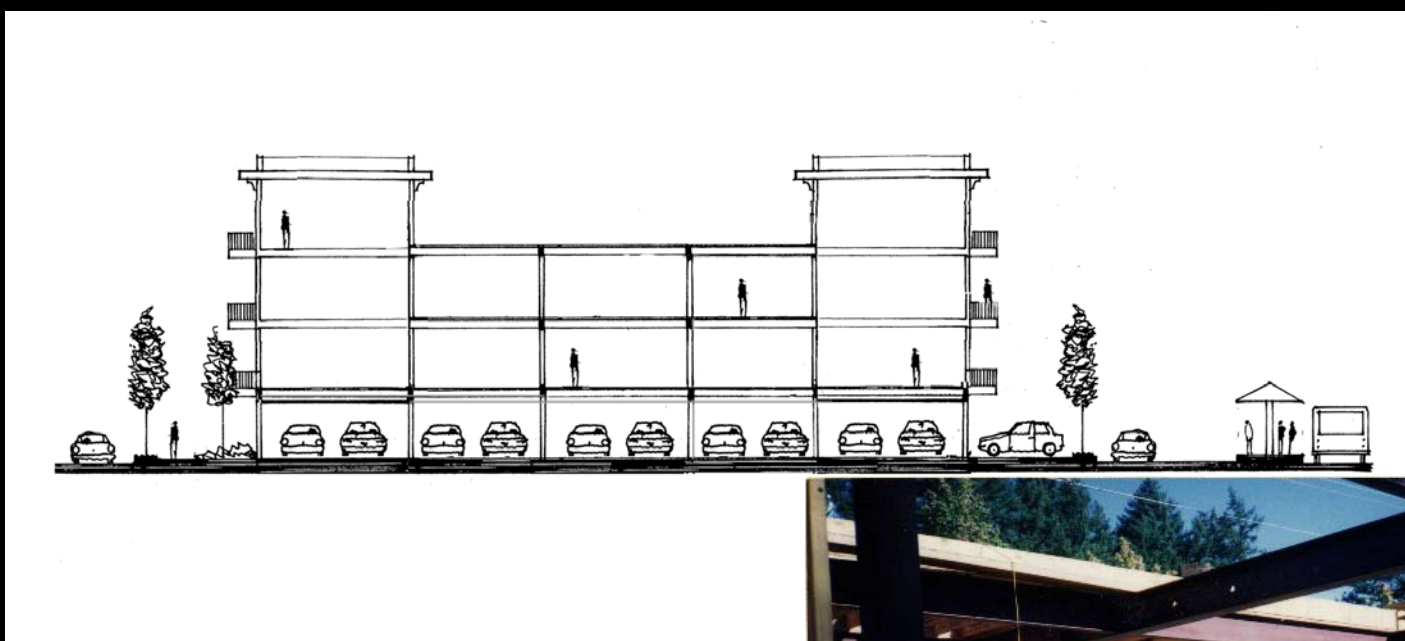
Works best with low parking ratio

80 units/acre possible

Not as efficient as podium

Site size and shape dictates how this is used

Bearing Walls Aligned



172nd

Less expensive

Separation is not bearing

Compromises parking and apartment layout



Bearing Walls Aligned



24 foot access driveway

18 foot parking span with 2 cars per bay

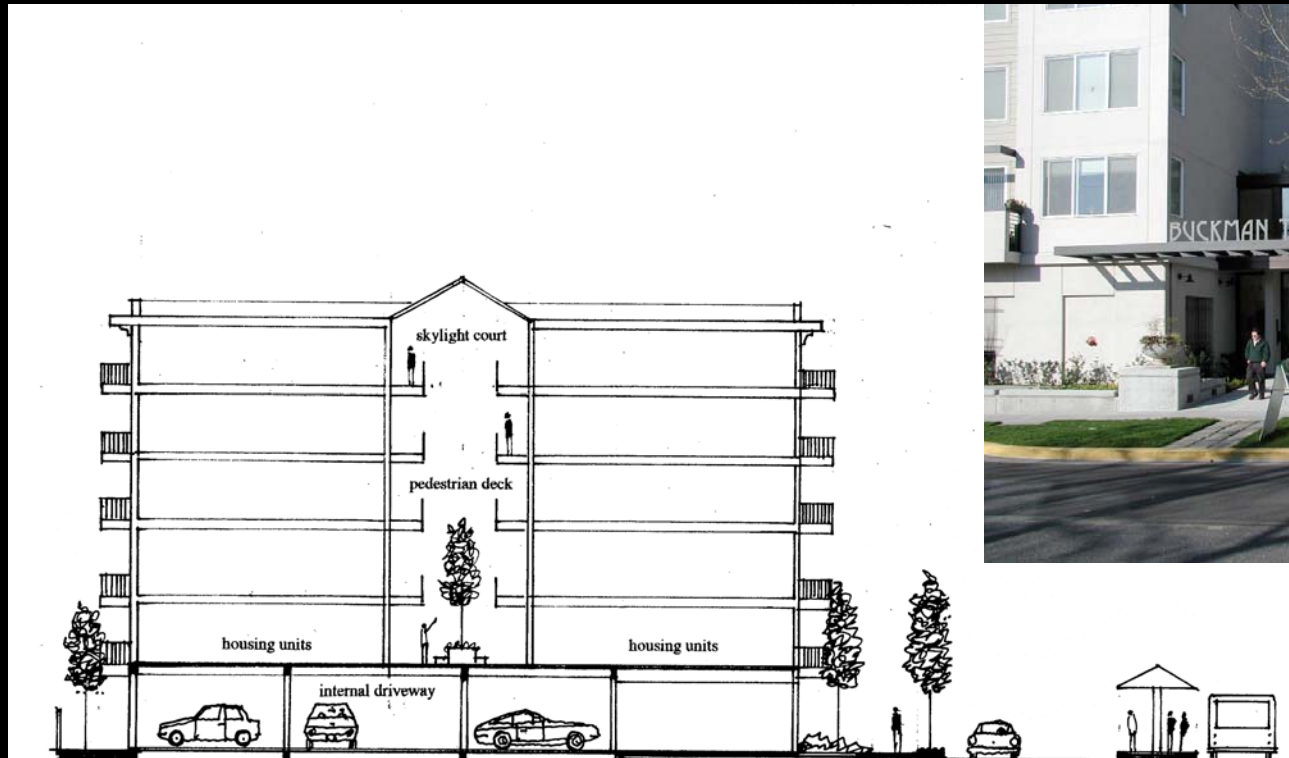


Rigid steel frame structure

TGIs attached to 2x6 plate bolted to steel frame

Load bearing for floors but not for walls

Podium - parking at grade

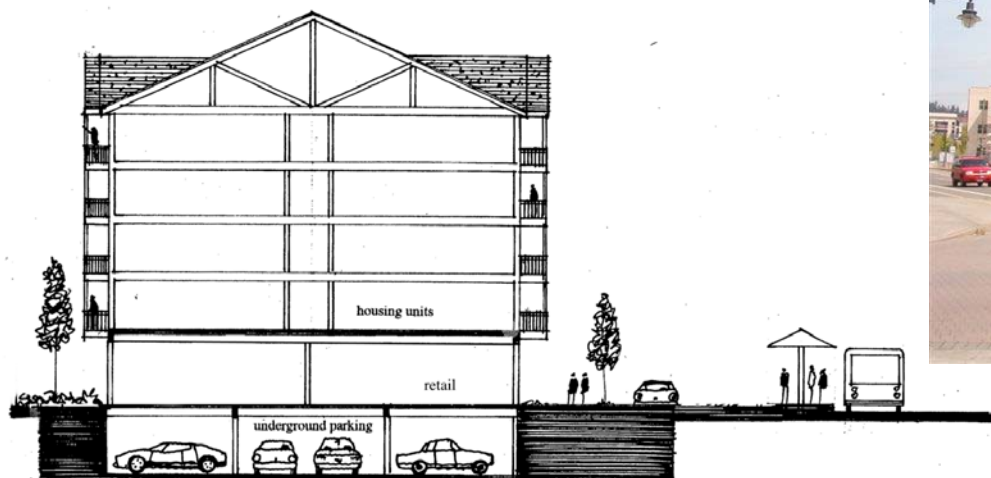


*Buckman
terrace*

Allows for maximum efficiency for 2 or more buildings vertically stacked

Post Tensioned Slab can be expensive on small applications

Underground parking



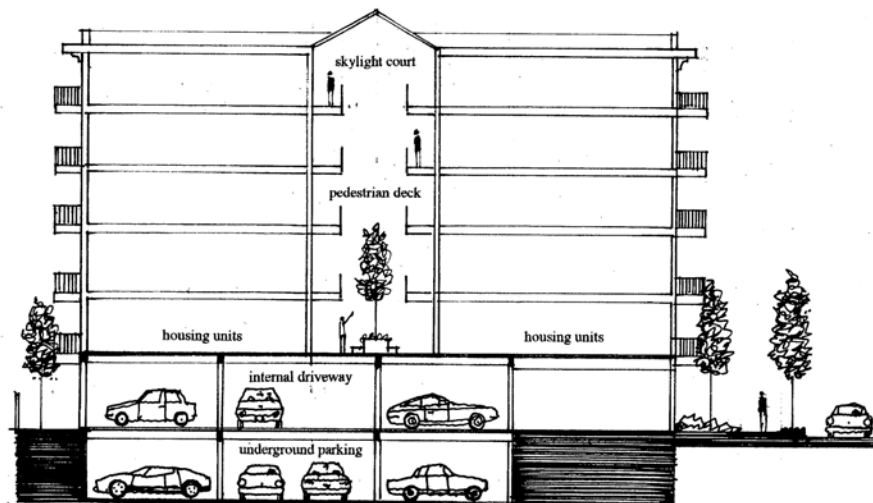
The Crossings

Very expensive

Allows full retail depth

Allows separation of commercial and residential parking

Double Podium -at grade/underground parking



Type 5 : Highrise with underground parking and a concrete podium



Merrick

Expensive

Maybe needed when 1.0 or higher parking ratio is desirable in densities over 130 units/acre

Non communicating levels



Warped site to make 2 levels possible
Inexpensive structure with no concrete ramp
In residential violates the “50 foot” rule
Works best in retail and office
Doesn't add much density

Russellville

Retail wrap



*Lakeview
Village*

Retail wrap

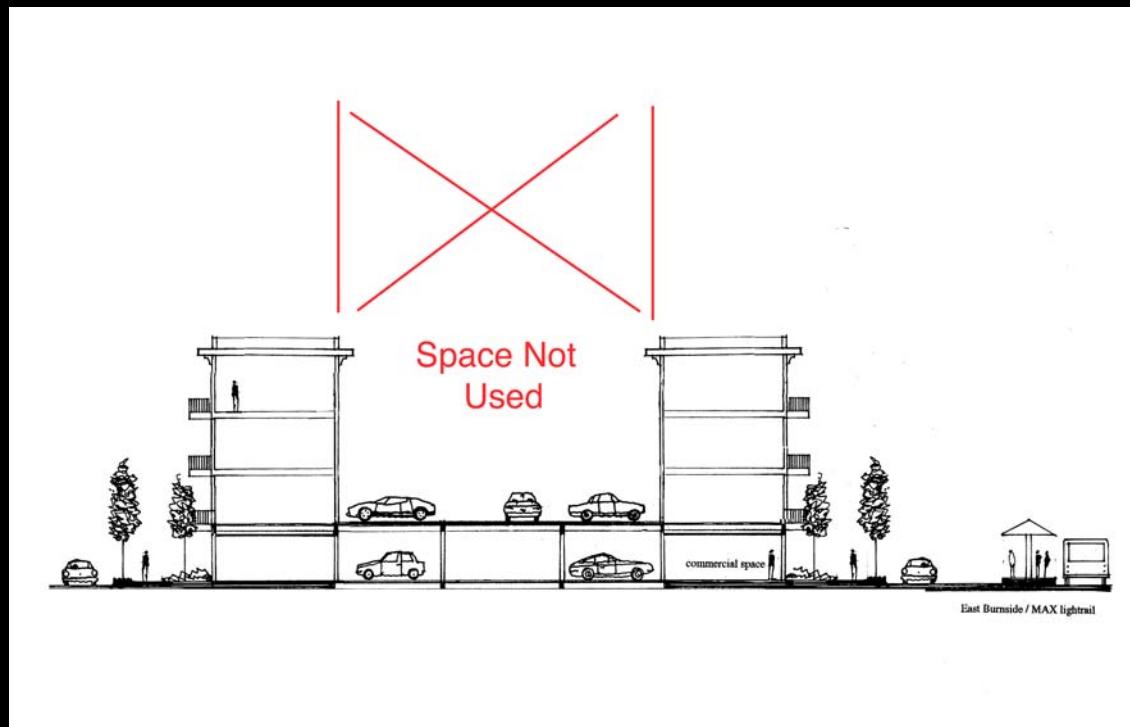


*Lakeview
Village*

M E T R O P L A N N I N G D E P A R T M E N T



Retail wrap



Parking very close

Allows easy access to upper levels

No vertical firewall separation required because no building above parking

Density is less because unused area above parking

May compromise the most efficient layout for parking and may result in higher parking cost

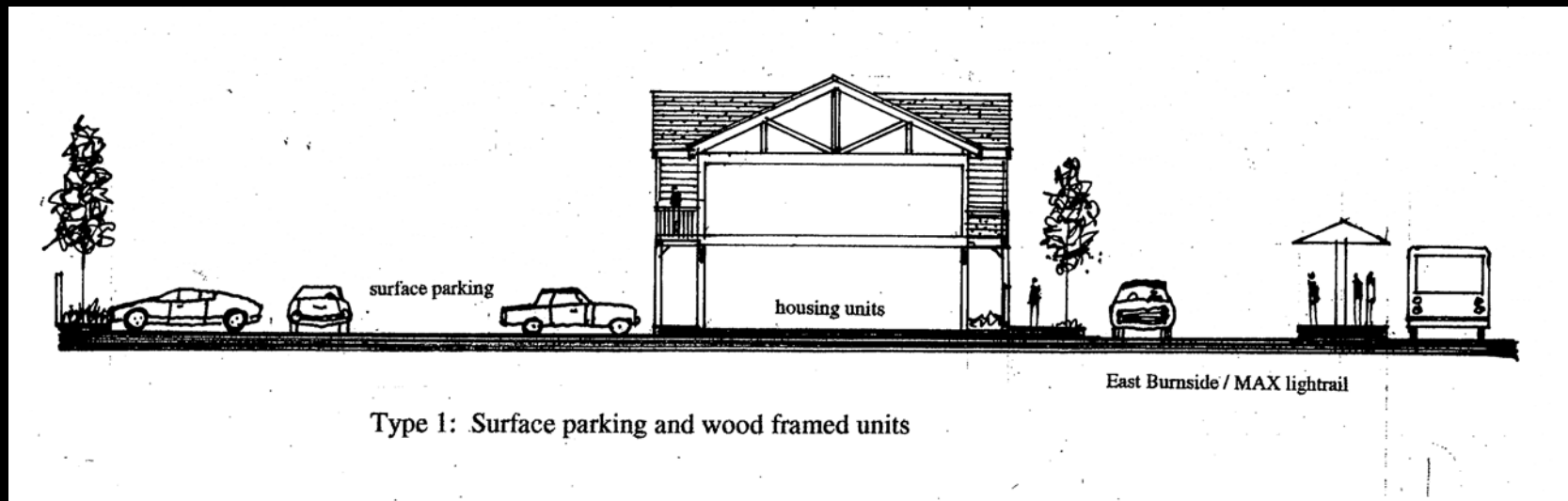
Better alternative than a stand alone parking garage

Relationship between Density and Parking

17-22 units/acre



3 stories surface parking

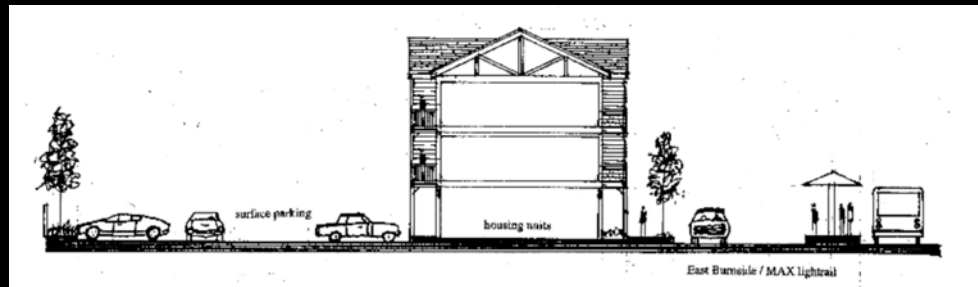


35 units/acre

Gresham Central

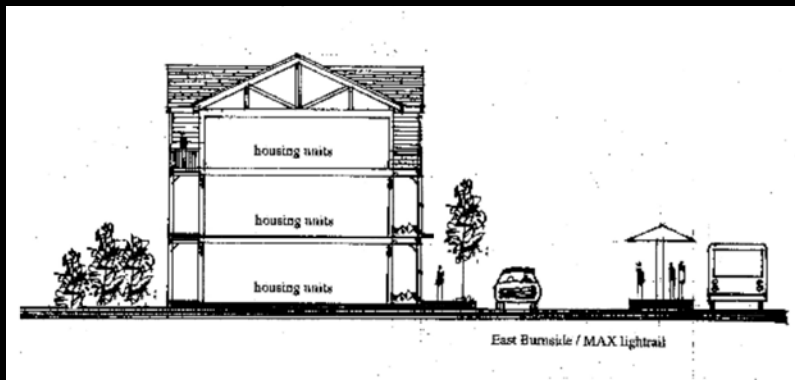


*3 stories reduced
parking ratio*



50 units/acre Gateway

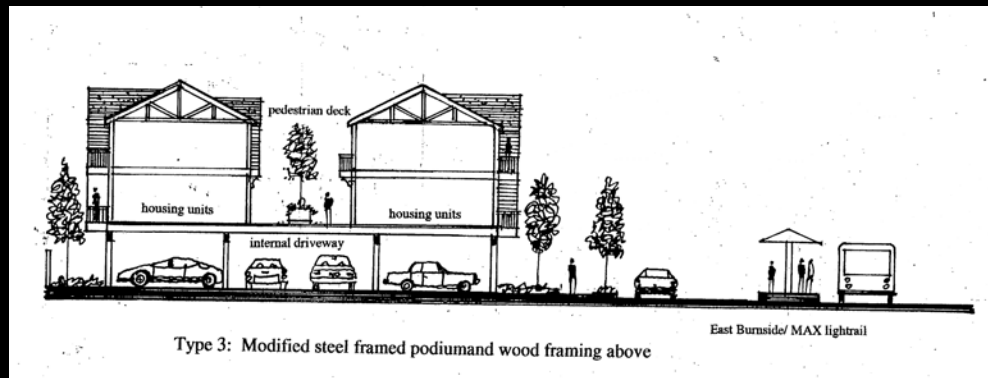
*3 stories
no parking*



60 units/acre 172nd and E Burnside



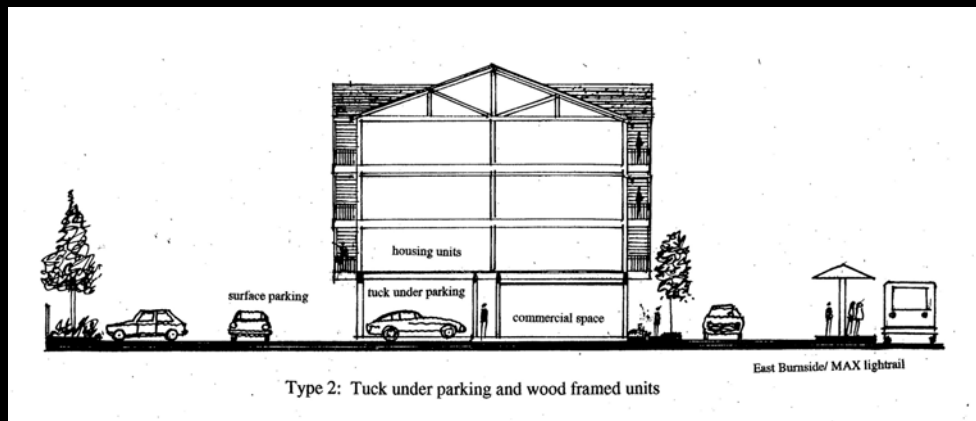
*3 stories
structured
parking, low
parking ratio*



82 units/acre Central Point, Gresham



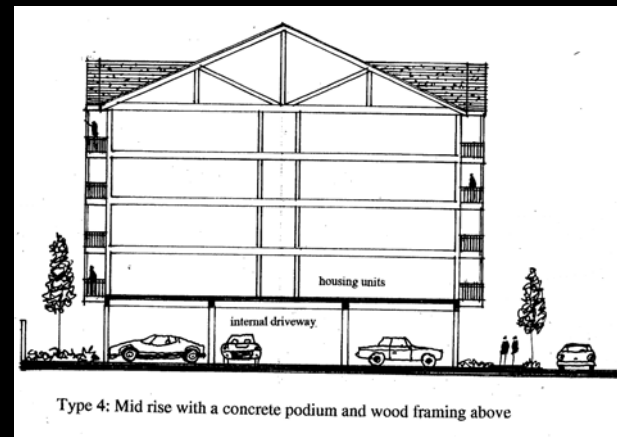
4 stories, tuck under parking, low parking ratio



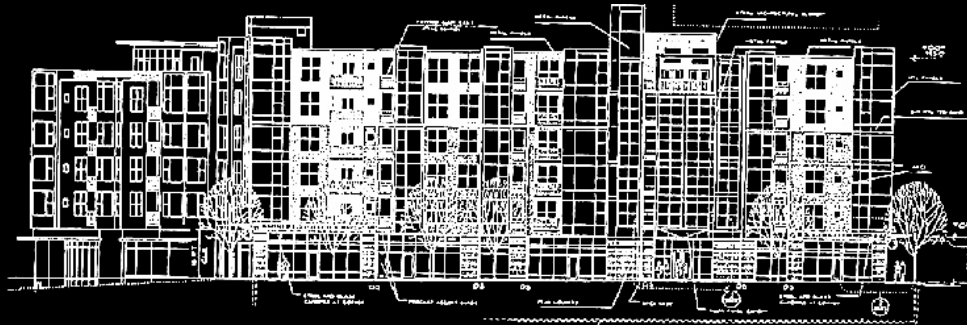
137 units/acre Buckman Terrace



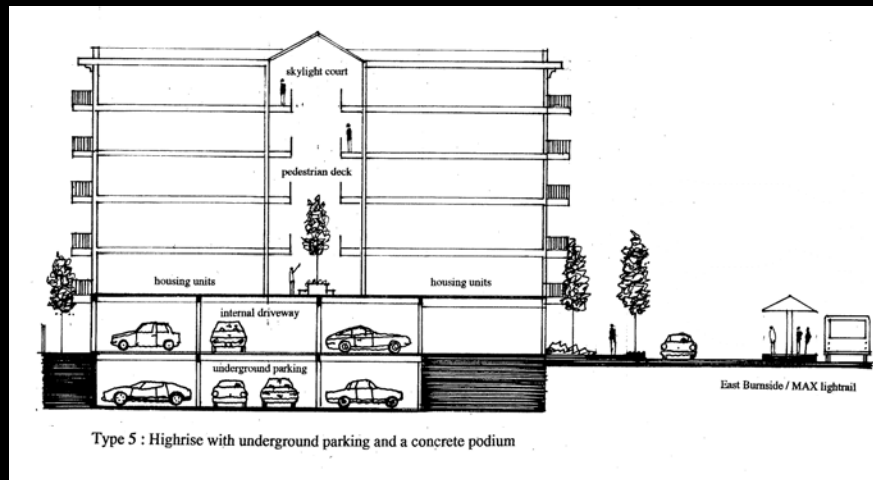
*5 stories,
structured
parking, low
parking ratio*



198 units/acre Merrick, Lloyd District



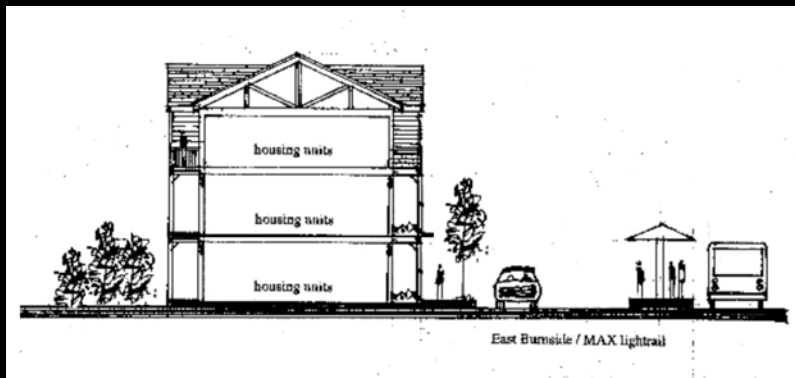
*6 stories
structured
parking, low
parking ratio*



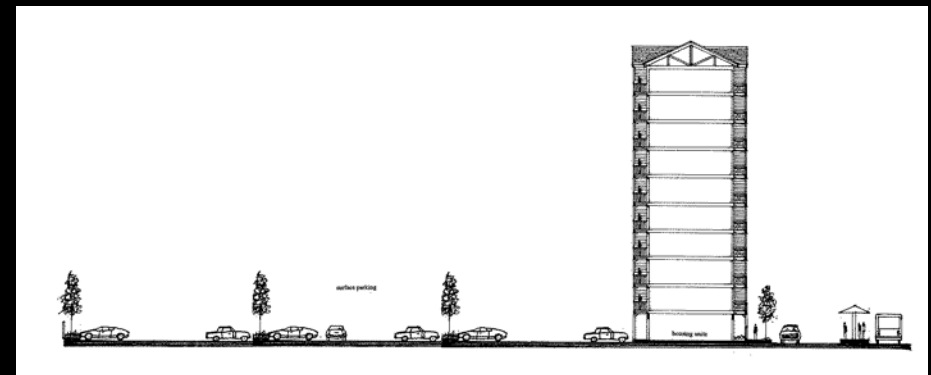
Interesting....



Its all about reducing parking ratio and structuring it.....most centers still have high parking ratios - all centers need to reduce to 1.0 and allow as low as 0.7



*50 du/acre
3 stories
no parking*



*35-40du/acre
10 stories
2:1 parking ratio (surface)*

Low Parking Ratio Support

When you go below 1.0 Parking Ratio consider

1. Charge for all covered parking
2. Try to get Flexcar in your building or nearby
3. Provide first rate bicycle facilities (lockers, wash areas, secured bike parking, etc)

