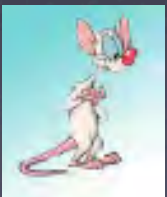
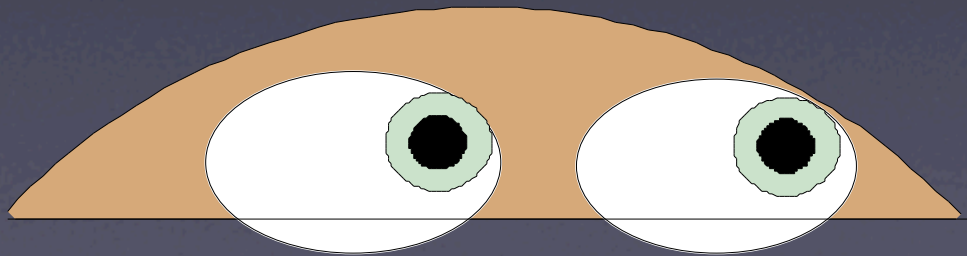


THINKING



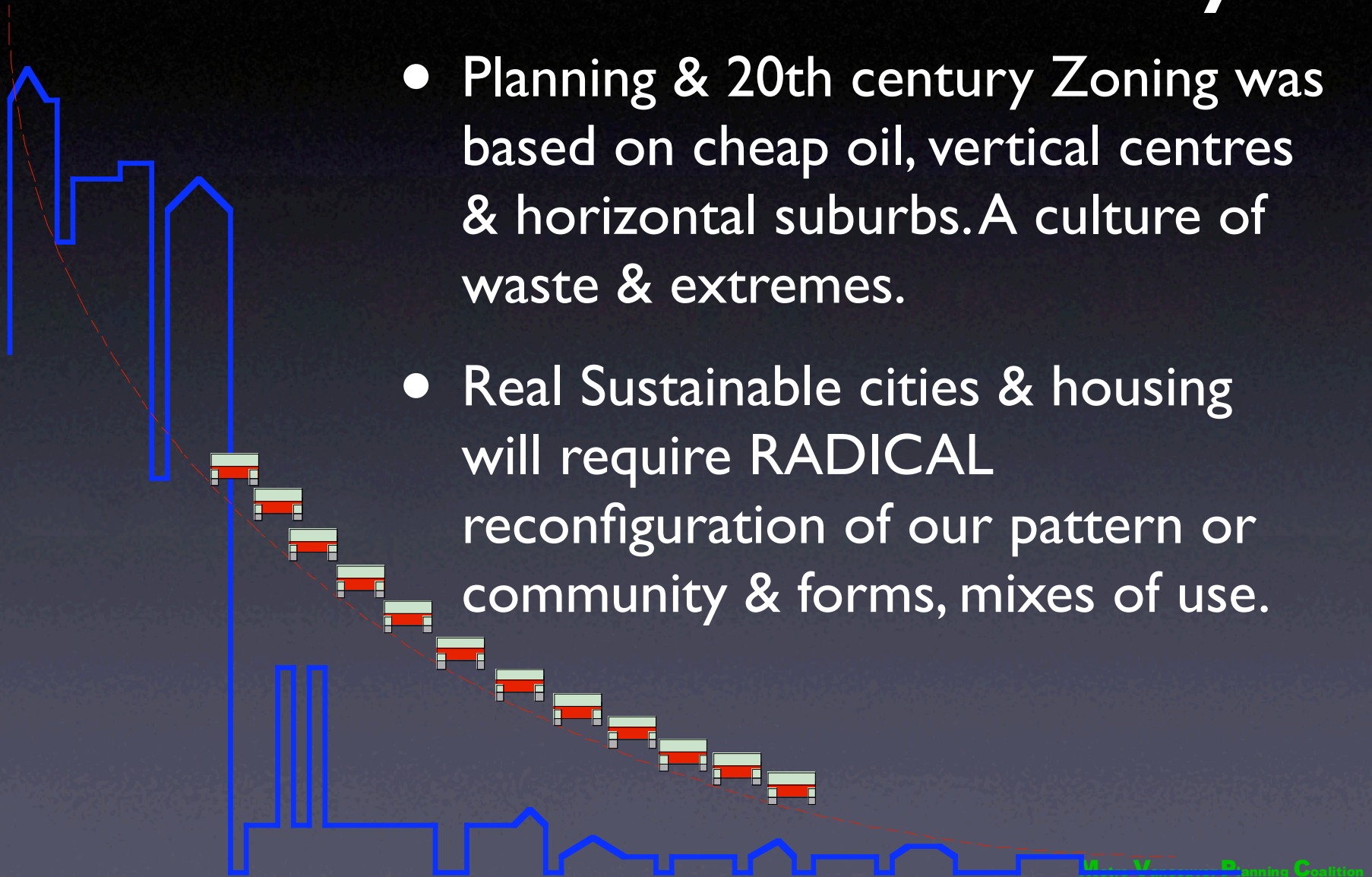
Are you pondering
What I am pondering?



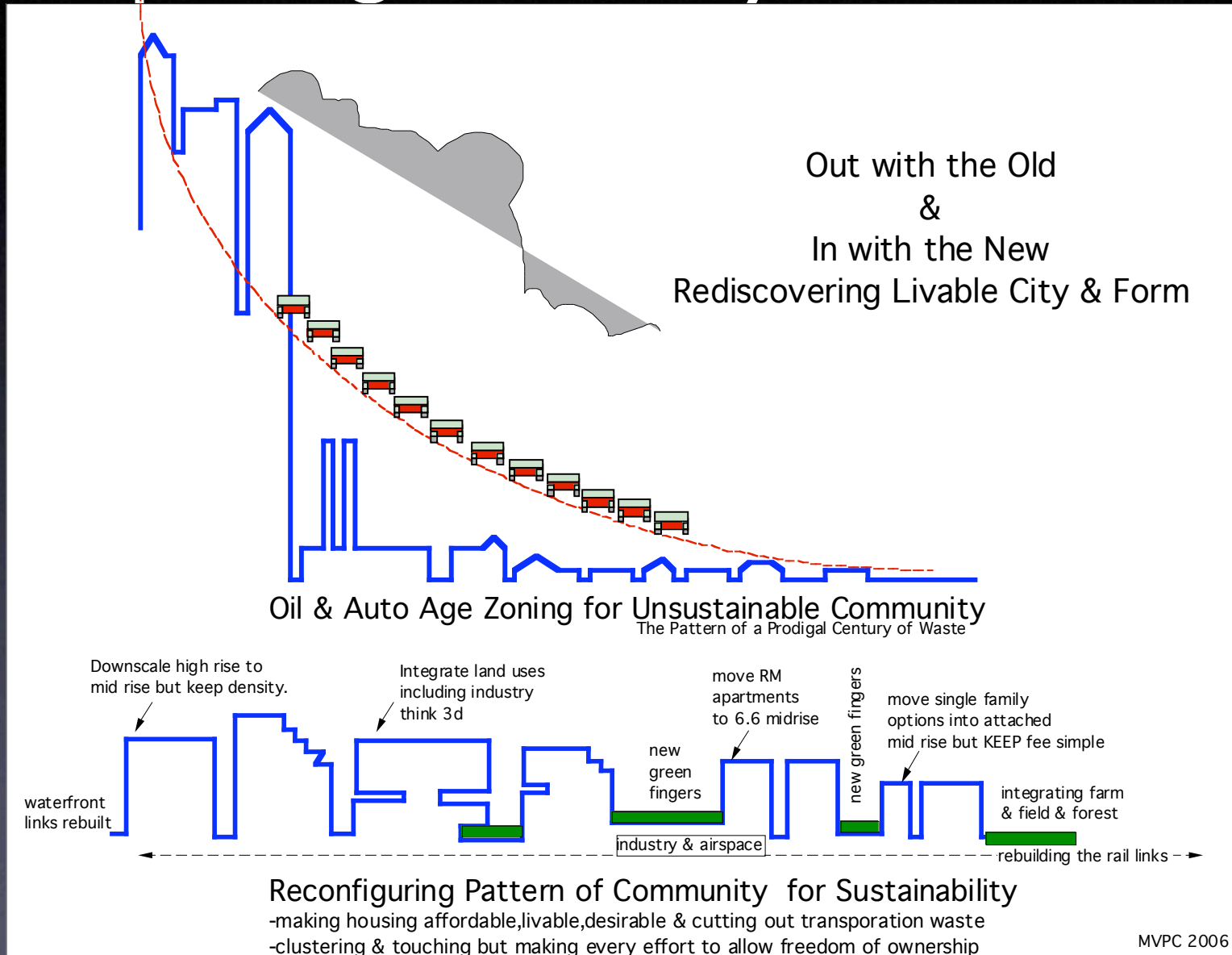
Metro Vancouver Planning Coalition
Missing Housing Quest 2006
Metro Area Housing Paper 2006
VCPC Housing Workshop 2006

The Unsustainable City

- Planning & 20th century Zoning was based on cheap oil, vertical centres & horizontal suburbs. A culture of waste & extremes.
- Real Sustainable cities & housing will require RADICAL reconfiguration of our pattern or community & forms, mixes of use.



Repairing a century of mistakes



Green baby steps?



- Most of our past 100 years of development is not sustainable in the approaching age After Cheap Energy. We have to contract.
- Many of our current efforts to build Green, Plan Green are well intentioned starts but many are also not sustainable either. High rises & suburbs are at risk.
- The key for cities is land conservation in every form to reduce all secondary energy consumption spawned by cheap energy planning and built forms.

?Sustainable City?



Why we must radically change, but take control to do it on our terms, not in reaction to collapse of any kind.

Globalization & An Unsustainable City.

\$

1. House prices have suffered the impact of Globalization: Vancouver discovered.

The impact is that the residents or their children have to relocate.

If density was acknowledged, all could stay. And the city footprint would be constrained rather than feeding urban sprawl.

2. City is at fault for not recognizing the reality of normal city maturation, allowing densification ahead of the demand curve.

Non-local money inputs.

International new investors/buyers have inflated prices out of reach of the now young adults who grew up here.

correction?
or rezone to increase supply & make home ownership real & sustainable again.

Olympic Bubble & Vancouver

The Baby boom 'die off' or less demand/more supply correction to be expected elsewhere, will be offset by Global Impacts & migration to more desirable spots like Vancouver.

Baby Boomer Impact on Market 1970-1980.

'Middle Class' Wages in real terms have remained flat in Constant Value \$ 1975-2006
Lower income groups worse off/ middle class eroded from city.

House prices have risen past inflation rates, past wage rates, fed by Global demand, too few houses on market compared to whole.
- Artificial markets created which drag all others with them until which trigger?

3. Environmental & Social degradation due to absurd market impacts.
-Why city density & maturation are vital sustainable needs.

Housing crisis is also disguised by so called new "affordable housing" which now includes apartments, houses at great distances- this does not include other costs to overcome these new conditions: less house per dollar & higher environmental costs from not accepting densification earlier, like transportation & environment impact. As these are not sustainable patterns, a collapse is unavoidable. New patterns must happen by our design, not by accident.

House Price Dynamics

World market widens gap for former residents.

Geographic Displacement of historic residents.

1975

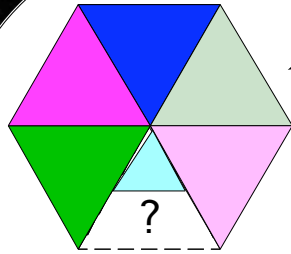
Expo 86

2006

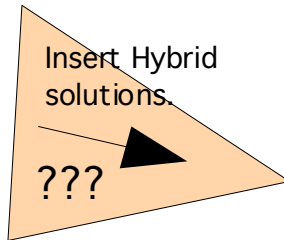
VCPC Discussions 2006/B&A • SP

Land conservation

- Our cityscape is essentially undeveloped land
- Our rooftops show an untapped potential
- Our streets make up 25-40% of the city & they can serve more sustainable community functions.
- Tax reform is needed to shift attitudes in land use & conservation, end subsidies to land waste.



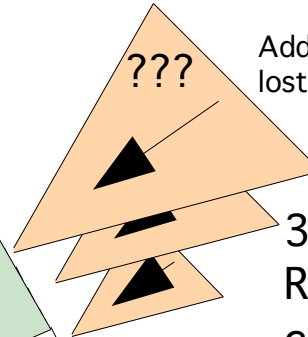
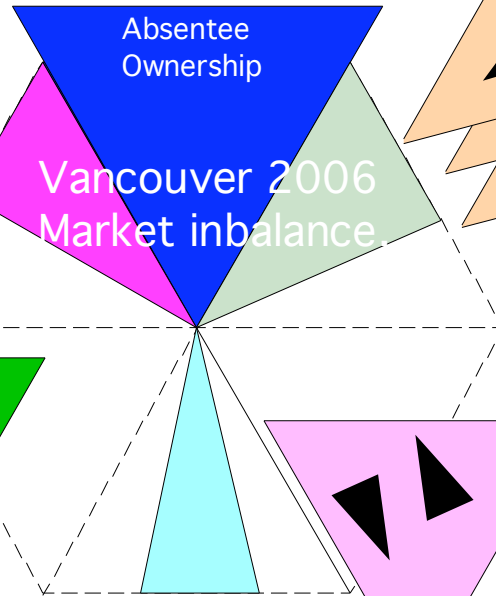
1. Old stable community:
housing for all -but not at
the bottom.



Suburban sprawl:
displaced middle class=
social and environmental mess

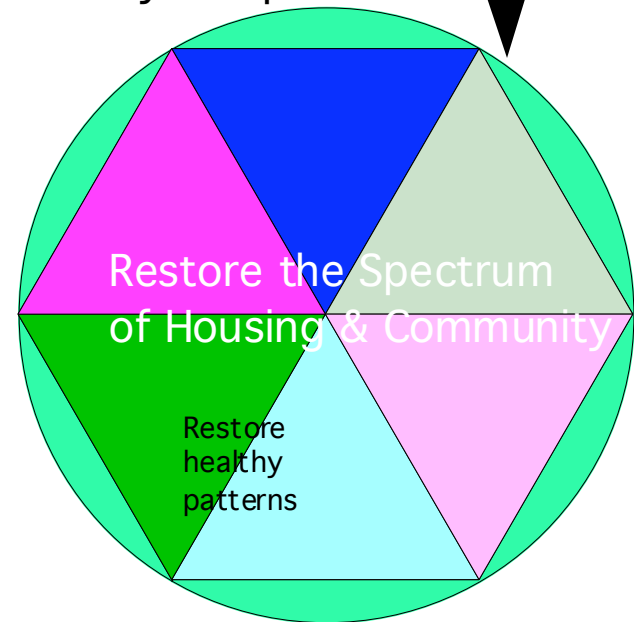


2. Present Unsustainable City:
Housing for Rich, shoving Middle Class to suburbs,
Dwindling lower level support housing,
Time to insert new Wedges of Sustainable Housing



Add the **Missing Housing**
lost in cheap energy era.

3. Restoring the balance,
Round out housing, reduce
city footprint.



What are the Missing Wedges of Sustainability?

Change: pattern of the city.

- Reduce the sprawl, claw back for rural uses
- Make industry use land efficiently & reintegrate industry into the community
- Upgrade density in urban fingers
- Reduce high rise heights but keep higher density, integrate family housing
- Invigorate “Green Fingers” at each level.

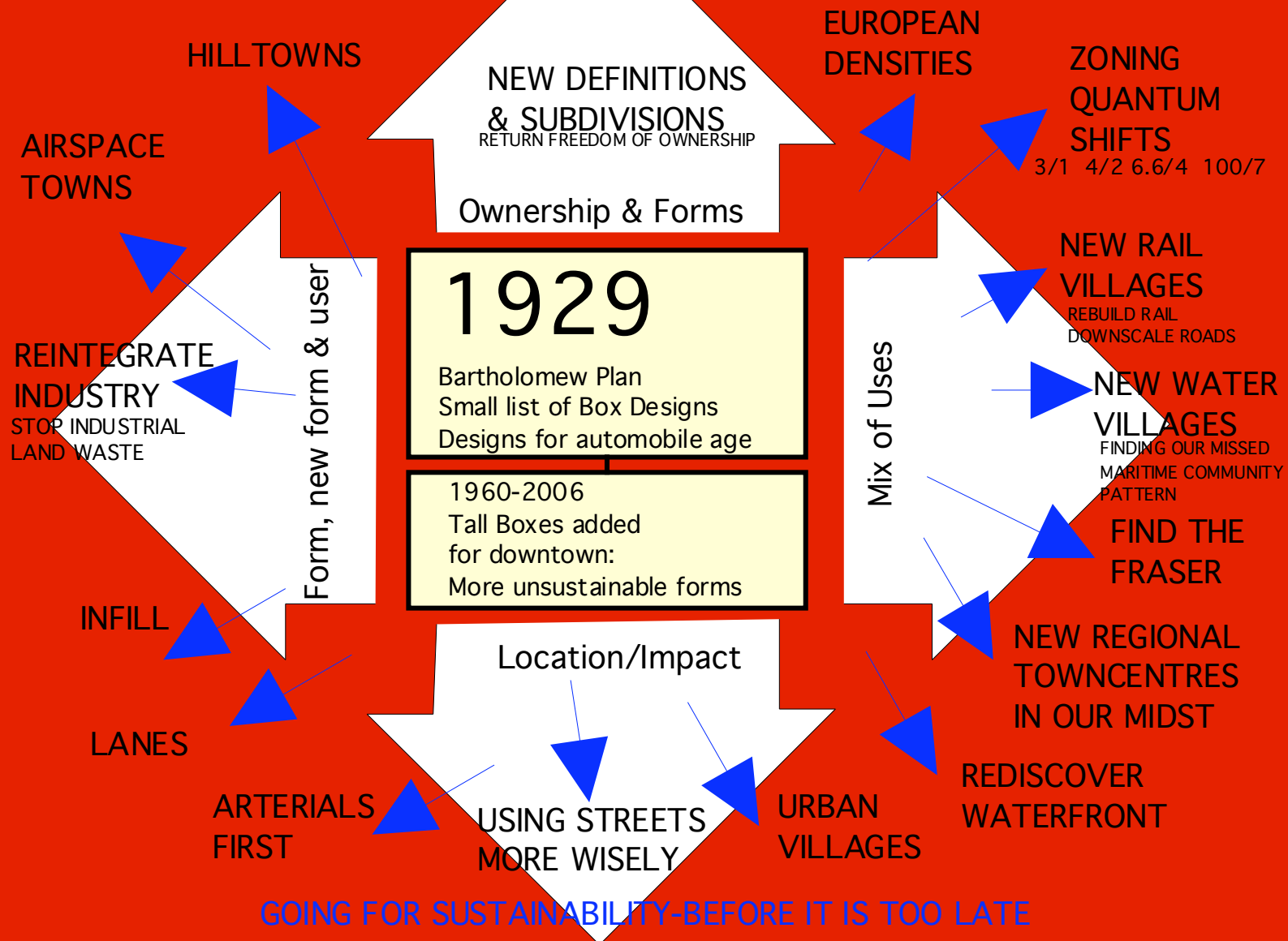
A Limited Vocabulary

- Low rise frame: short life, high maintenance, low durability, poor lifestyle options
- High rise towers: durable but high energy consumption, high envelope exposure, limited lifestyle options.



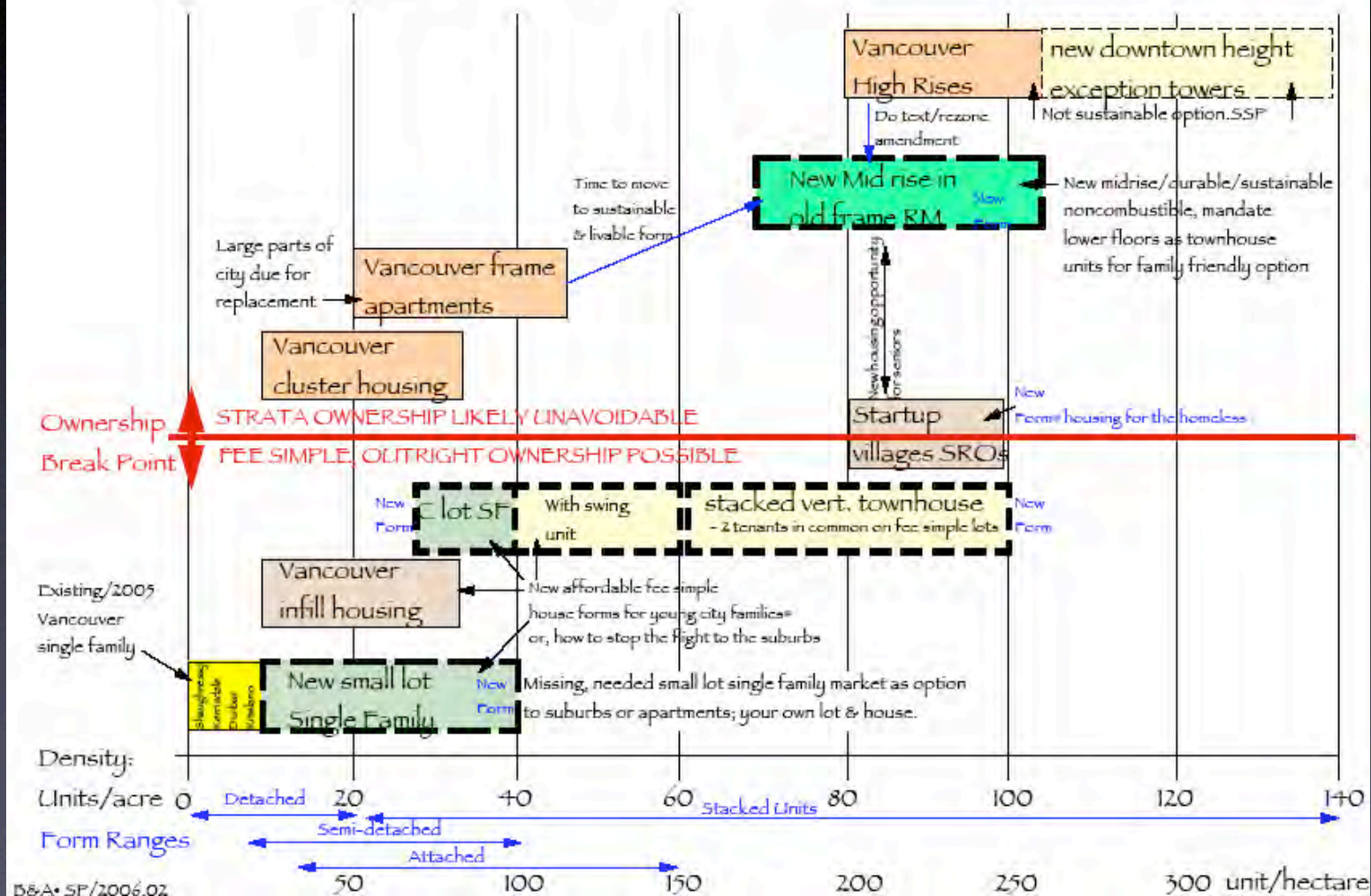
Stalingrad School of Urban Design?
Or lack of glass options in Vancouver?

BLOWING OPEN THE BOX



Our Missing Housing

Missing Housing from Vancouver Palette 2006



Eco Density: the Missing Wedges.

Emergency Measures:

Text Amendments.

Now: 2006: **Zoning Bylaw** TEXT
change for mid rise high density
sustainable buildings: C & RM zones.
(MVPC)(Book in progress).

Airspace Towns & Villages:
Land conservation applied to
forgotten potentials.
MVPC 2006.
(Book in progress).

Hillside Metro New Towns:
Land conservation applied to
forgotten potentials of BC's
greatest areas. MVPC 2006.
(Book in progress).

Looking for
other hybrids

Pilot Projects???
Not enough, do 10x more
can't wait, Act Now.

Area Plans: more fluff?
No time, new solutions
needed now. Use planning
but do not wait for planning.

Fast, effective, workable & known impacts
filtered across city landscape.

Does not waste time & resources on half way solutions

Starts Land Economy Measures Now,
Makes affordability a reality again Now.

Now: 2006: **Subdivision Bylaw**
change for small, rowhouse lots
district & arterial. (MVPC)

**Act Now!*

Rowhouse on Arterials:
MVPC 1992 report to Vancouver
- see also UBC 2005 Study.

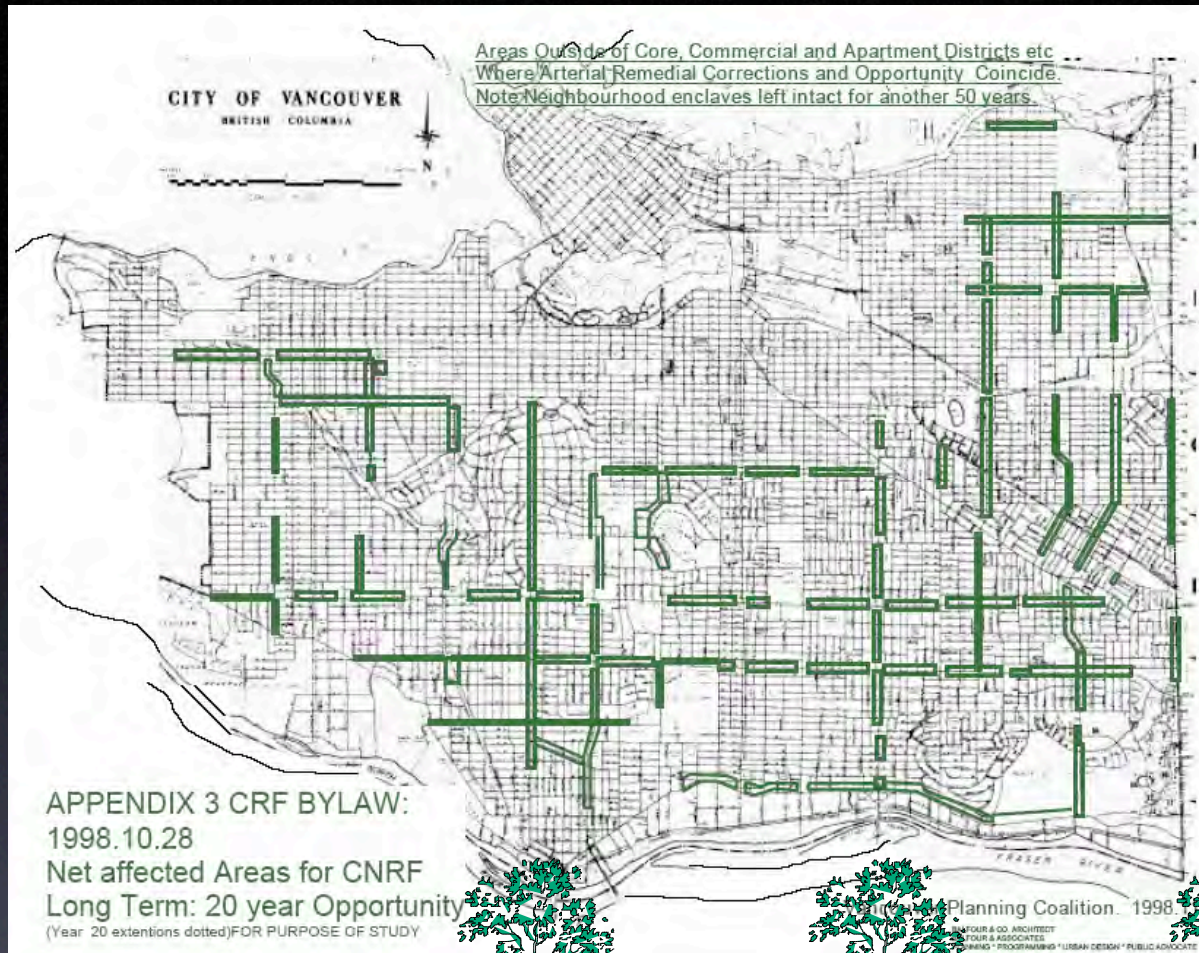
**Act Now!*

Startup Villages 1994
MVPC report to council on
Housing the Homeless

Good Old Infill: 1990- 2006
Lanes, suites, subdivision
- market is ahead of planning;
play catch up & do it right!

Arterial Rowhouses

MVPC Advocacy Report
1994-98



MORE TRADITIONAL 18' WIDE, 9 UNITS OF FEE SIMPLE ROWHOUSE ARCHITECTURE ALONG 41ST AVENUE, Planning Coalition

Mid Rise Optimals

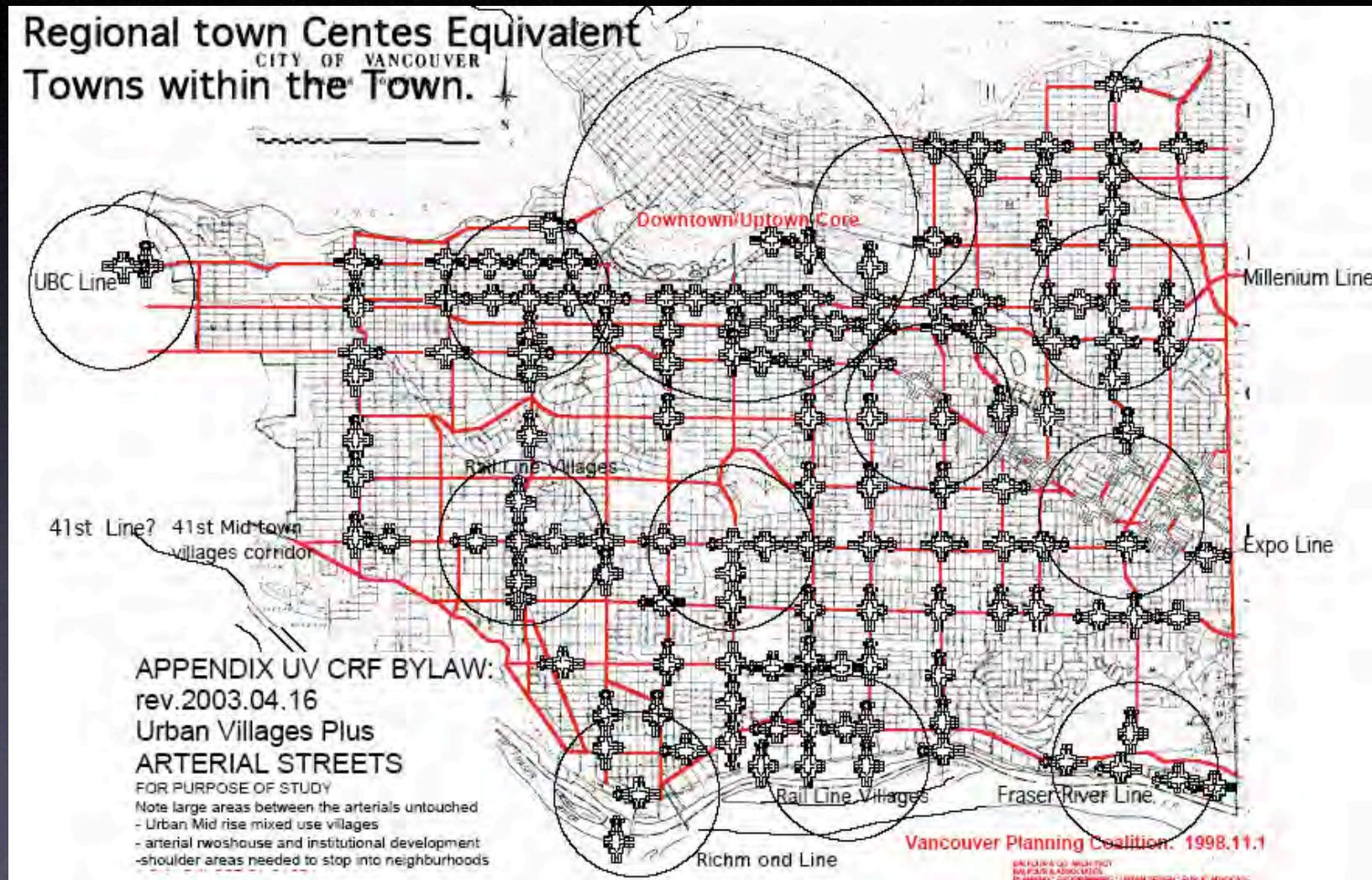
- Socially preferred: 70 visual range to street, social group by floors
- Environmentally; less envelope per unit, less energy
- More lifestyle/unit type options, more garden units
- Best options for family housing, social mix overall.



Arbutus: Molson's Site,
One of Vancouver's Success Sites



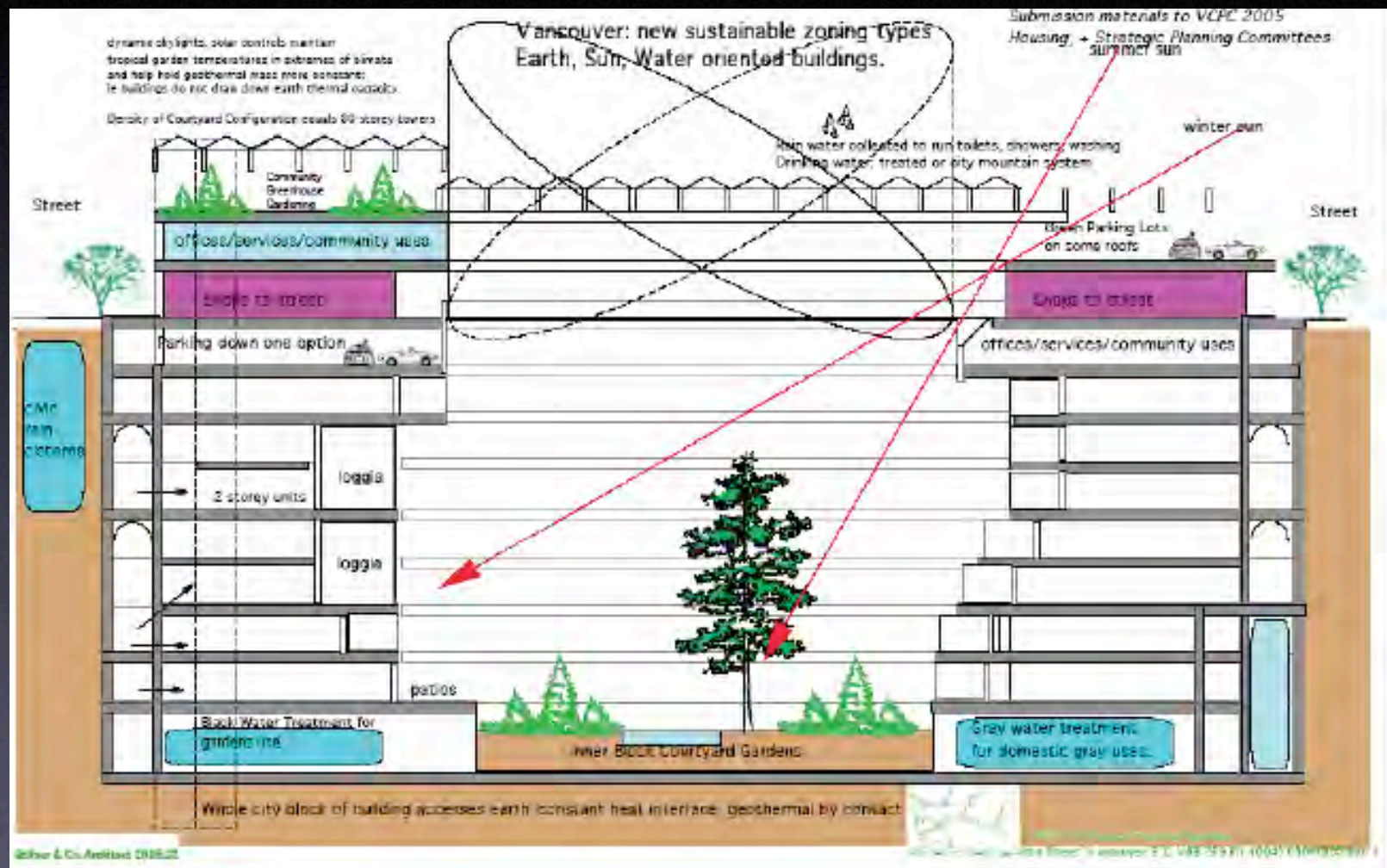
Urban Villages & Newtowns



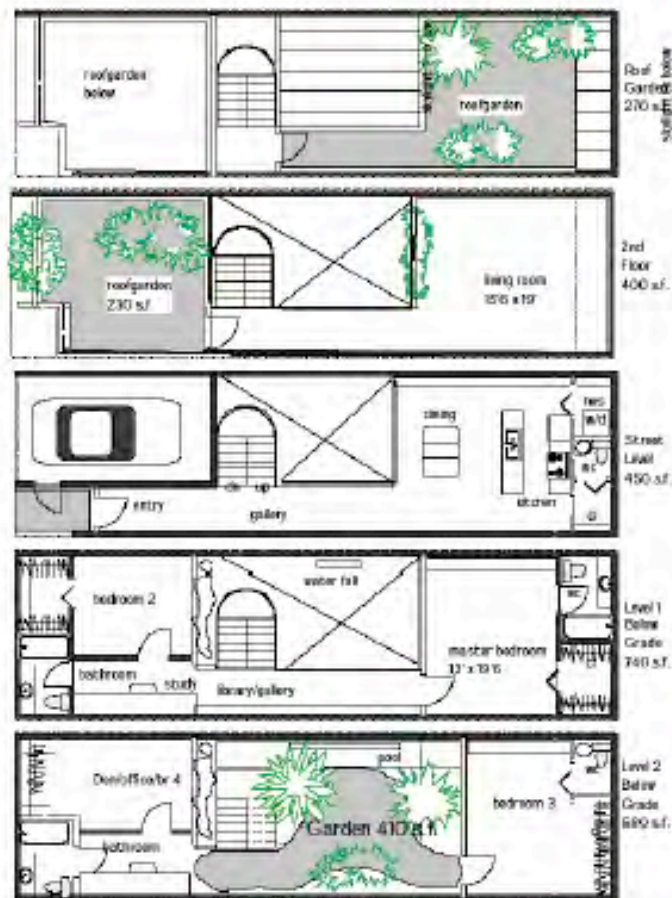
The Undeveloped City Pondering Sustainability?

More Vancouver Planning Coalition

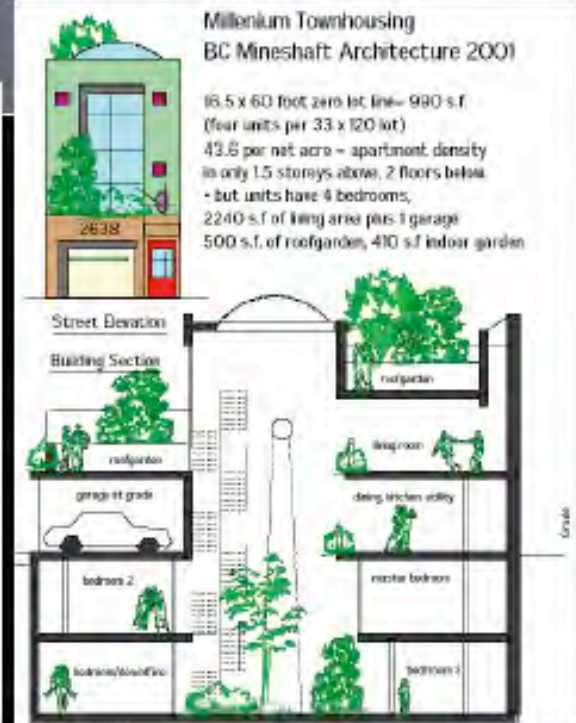
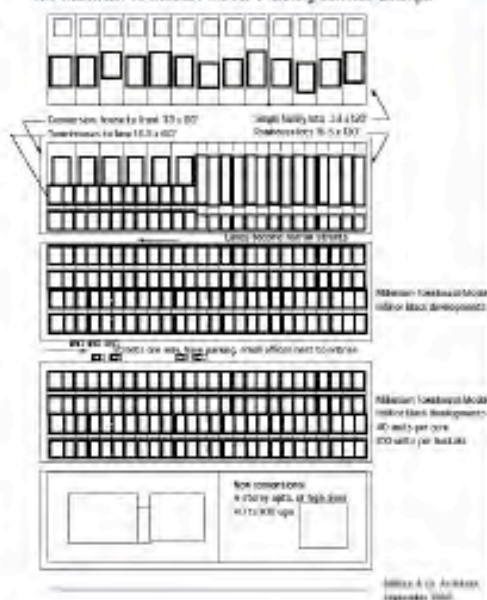
Earth sheltered city?



Alternate Directions: Earthsheltered



The Millers' Townhouse Model: Planning Context Example

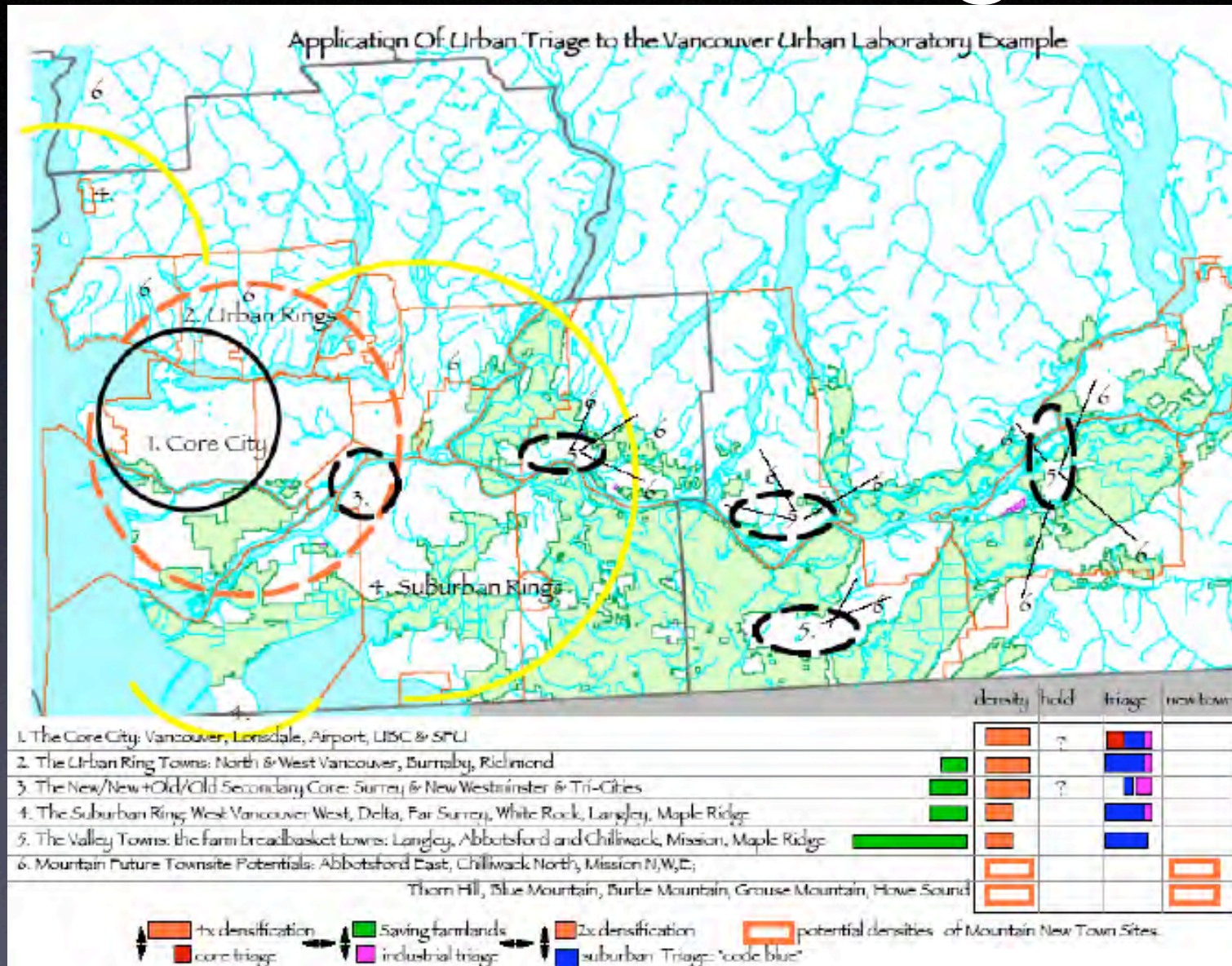


- Single Family Housing at 40 upa, earth sheltered infill fee simple subdivisions.

Result of Change?

- Urban triage areas will change to rural uses
- New Urban villages will foster sustainable living plus more options for lifestyles & increase options for outright ownership
- Modes of transportation will also radically shift, not by edict but by market choice.
- The sooner we embrace the needed changes the easier the transition or all.

Patterns of Triage

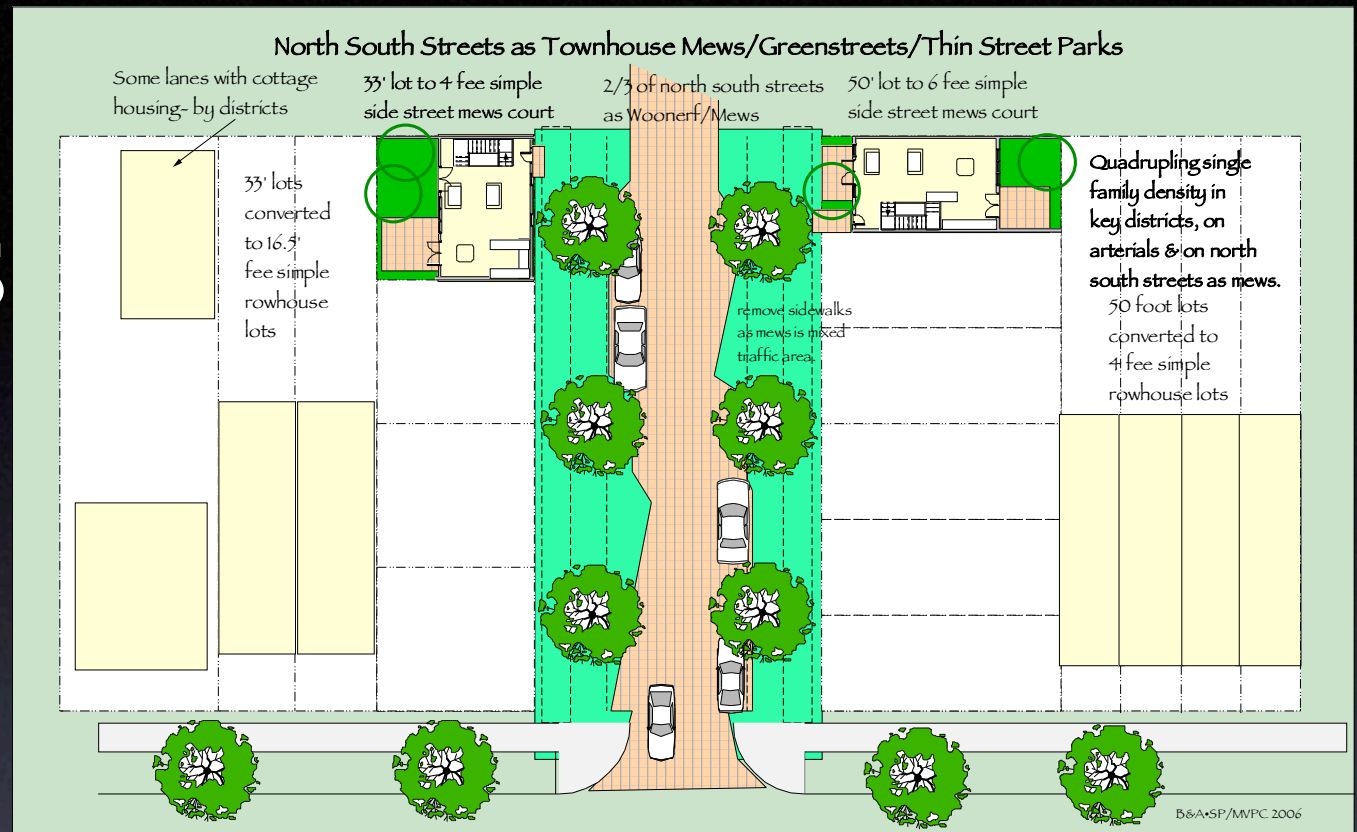


Outright Ownership

How can we ignore it?

- Not addressing this properly has driven most people to suburban sprawl.
- This can be corrected but it means we have to accept change in our urban centres & transportation corridors.
- Such basic human need is not met with needlessly complex strata controls & costs.

Families in the city.



- Rowhouse, fee simple attached single family is the most common use in cities world-wide but missing from Metro Vancouver.
- Apartment base townhousing with gardens under other units increases livable options.

The Missing House Forms of Vancouver: the Rowhouse Zones

Target House
Space 2400 sf
Making Single Family Affordable by Smaller Lots & Vertical Houses

Lot Size/ Configuration	20 X 120*	15 X 120*	12 X 120*	10 X 120*	12 X 80*	20 X 50*	15 X 40*	16 X 30*
FSR Type	2400 SF LOT	1800 SF LOT	1440 SF LOT	1200 SF LOT	960 SF LOT	1000 SF LOT	600 SF LOT	480 SF LOT
Density UFA	1.0	1.3	1.6	2.0	2.2	2.5	3	3.5
Density with suite	18	24	31	36	43	44	73	91
Density with suite	36	48	62	72	90	88	146	182
Coverage	.6	.6	.65	.7	.75	.9/.65	1.0/.8	1.0/.8
Height	3.5	3.5	4+	4.5	5	5	5.5	6.5
Gardens	.75	.5	.5	.5	.5	.8	1.0	1.0

(area with coverage is >1.0 as roof gardens are needed not discouraged).

Let live walls, concrete/code part 3 to be less than non-combustible, maximum 4 units join - if 2 are suites

street & address

1/3 of 60' lot

1/4 of 60' lot or 1/2 of 33'

1. shop
2. living
3. br's
4. master
5. loft

1. shop
2. living
3. br's
4. master
5. loft

1. shop
2. living
3. br's
4. master
5. studio
6. loft

Shop level to mews or street & living floor stepped back for gardens.

This also can be used in four square subdivision of residential lots to create housing on lanes option- See Millennium Townhouse Model.

Using C. zones for affordable family & mixed housing forms but giving back the base for commercial (but no heavy parking structures & cost)

back to back & stacked duplex range

commercial zones family rowhousing

street & mews oriented rowhouses

street oriented rowhouses/residential zones

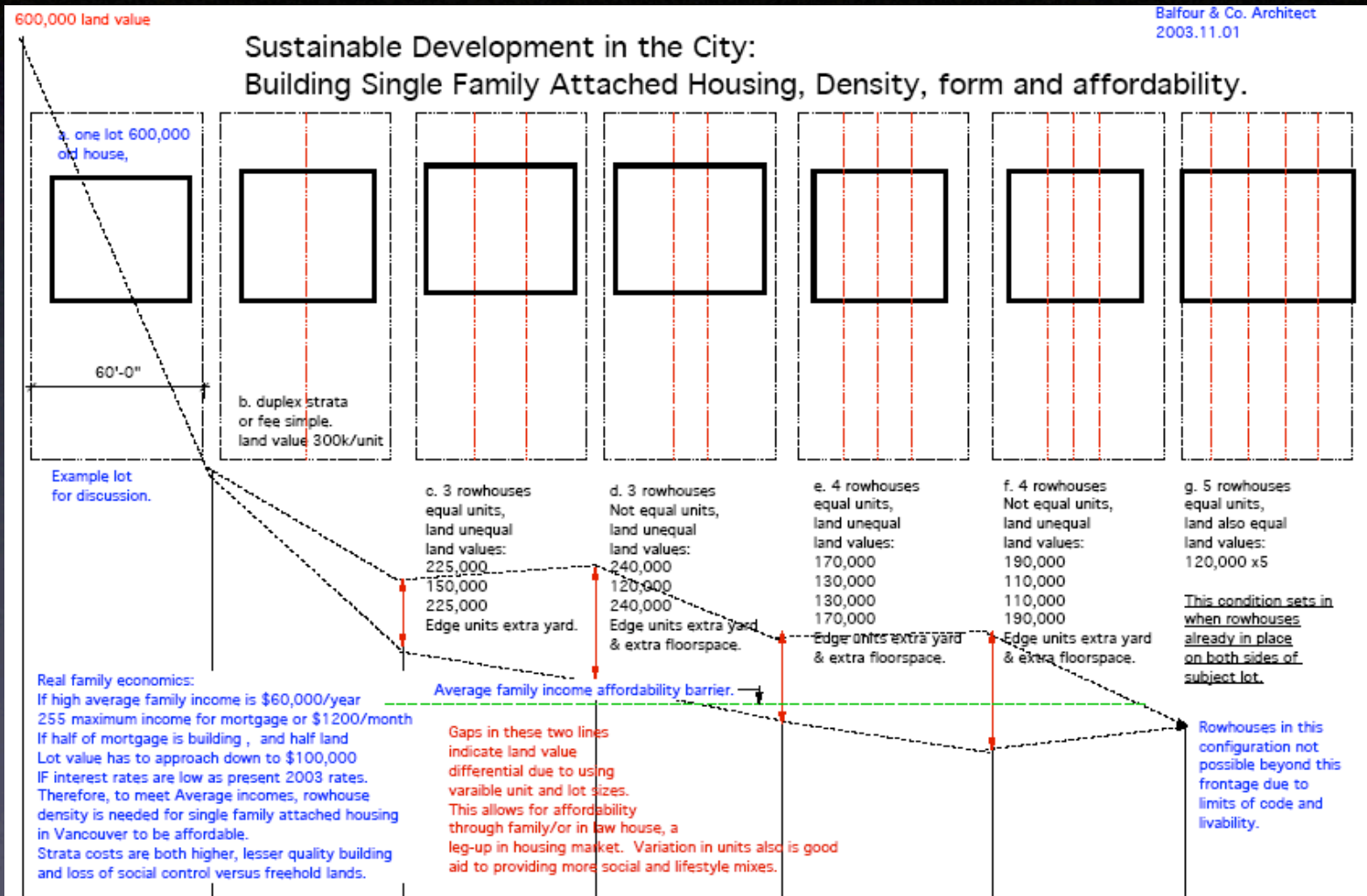
practical limit of accomodating cars on property
lanes required for rowhousing

shallow lots OR side oriented arterial mews lots

no parking or area parking solutions
- need for cars declines rapidly with density

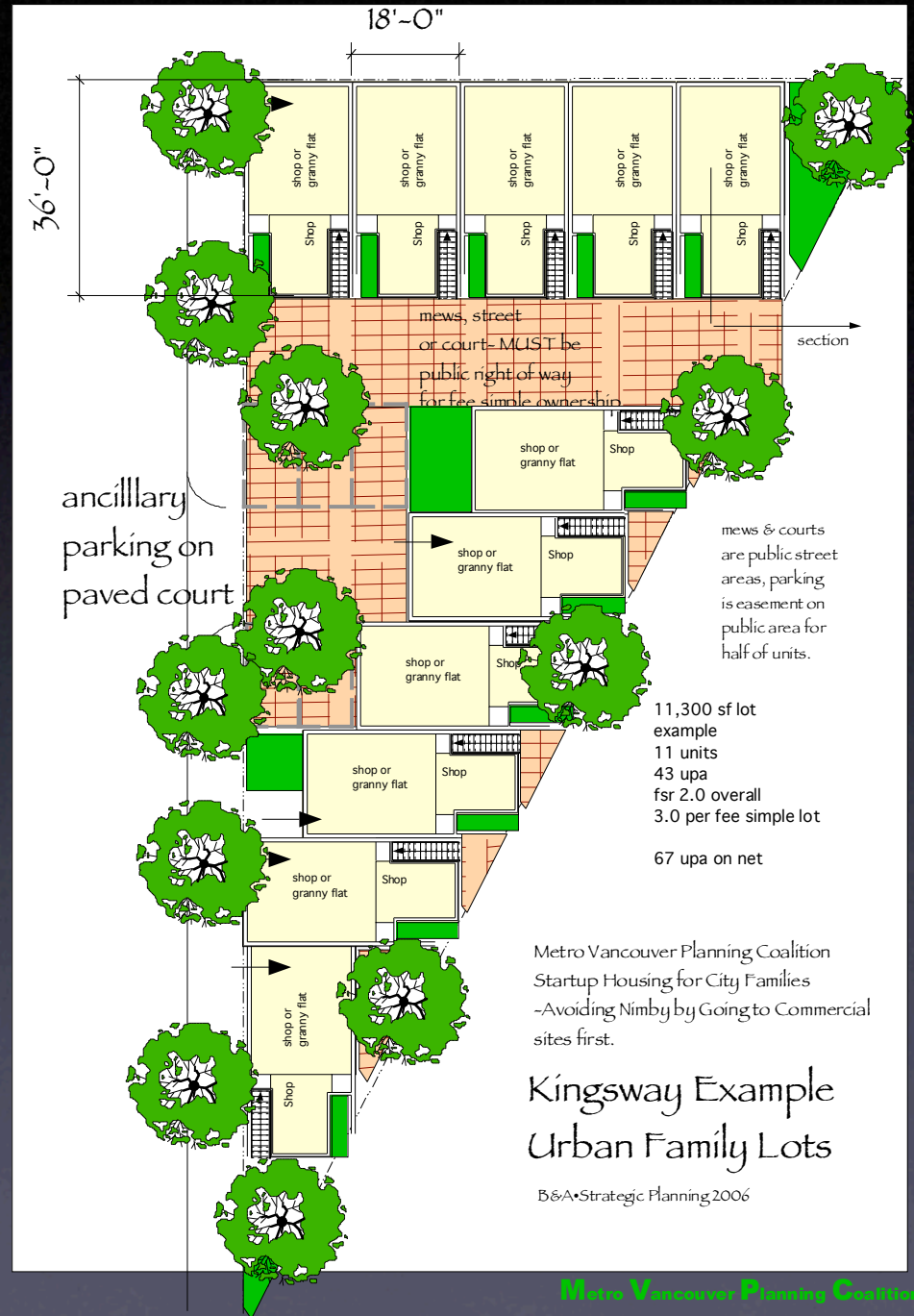
B&A • SP 2006.02.25

Infill & Affordability



Family Small Lots in Commercial Villages

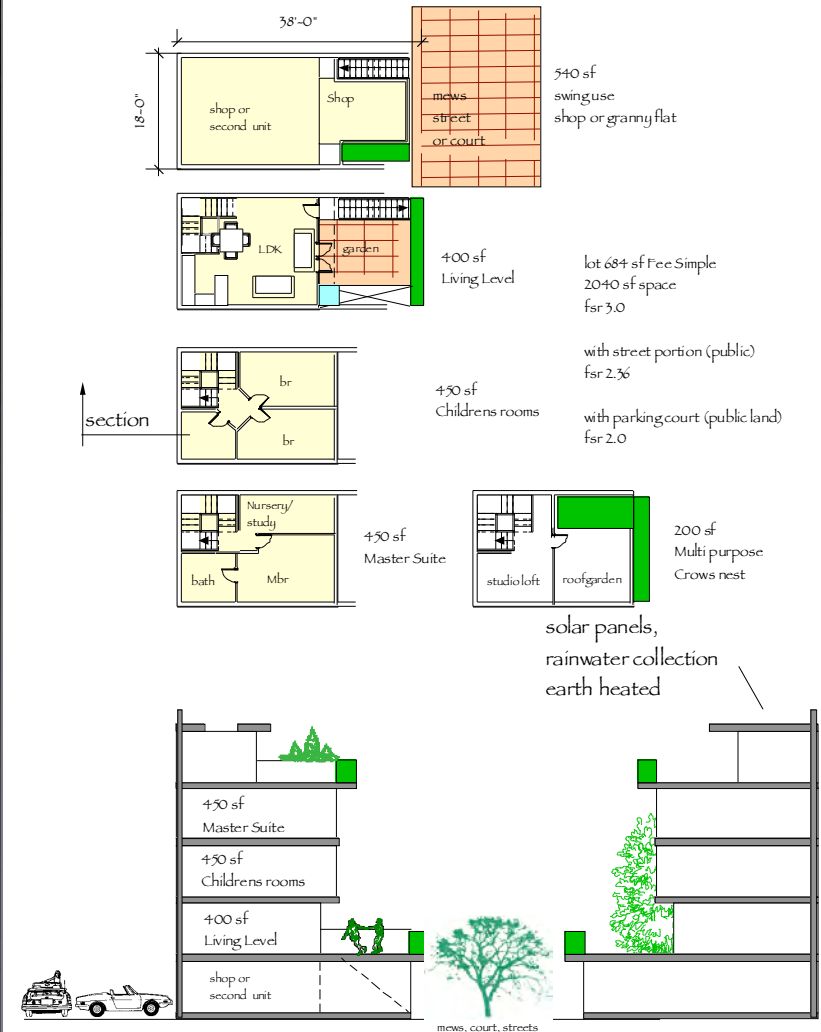
- 40 upa single family lots & commercial base on mews: fee simple lots.



Learning from Old World Villages

- Not for everyone but why deny this kind of option?

Metro Vancouver Planning Coalition Startup Housing for City Families



Startup Housing: Single family attached urban rowhouses with commercial base: in C zones.
Example: Kingsway, Main Street.

B&A Strategic Planning 2006

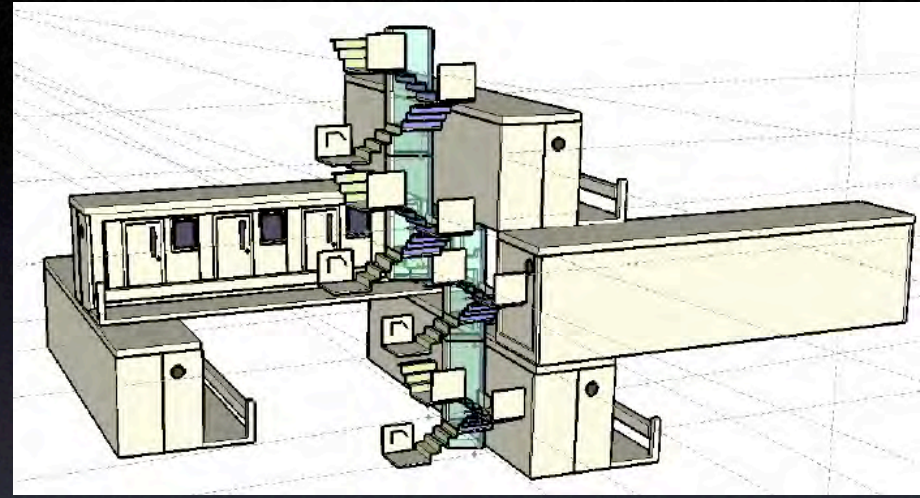
Small C lot, big house.





Urban Ranch-house

Housing the Homeless



Real Village Housing
Vancouver B.C.
2002.11.18



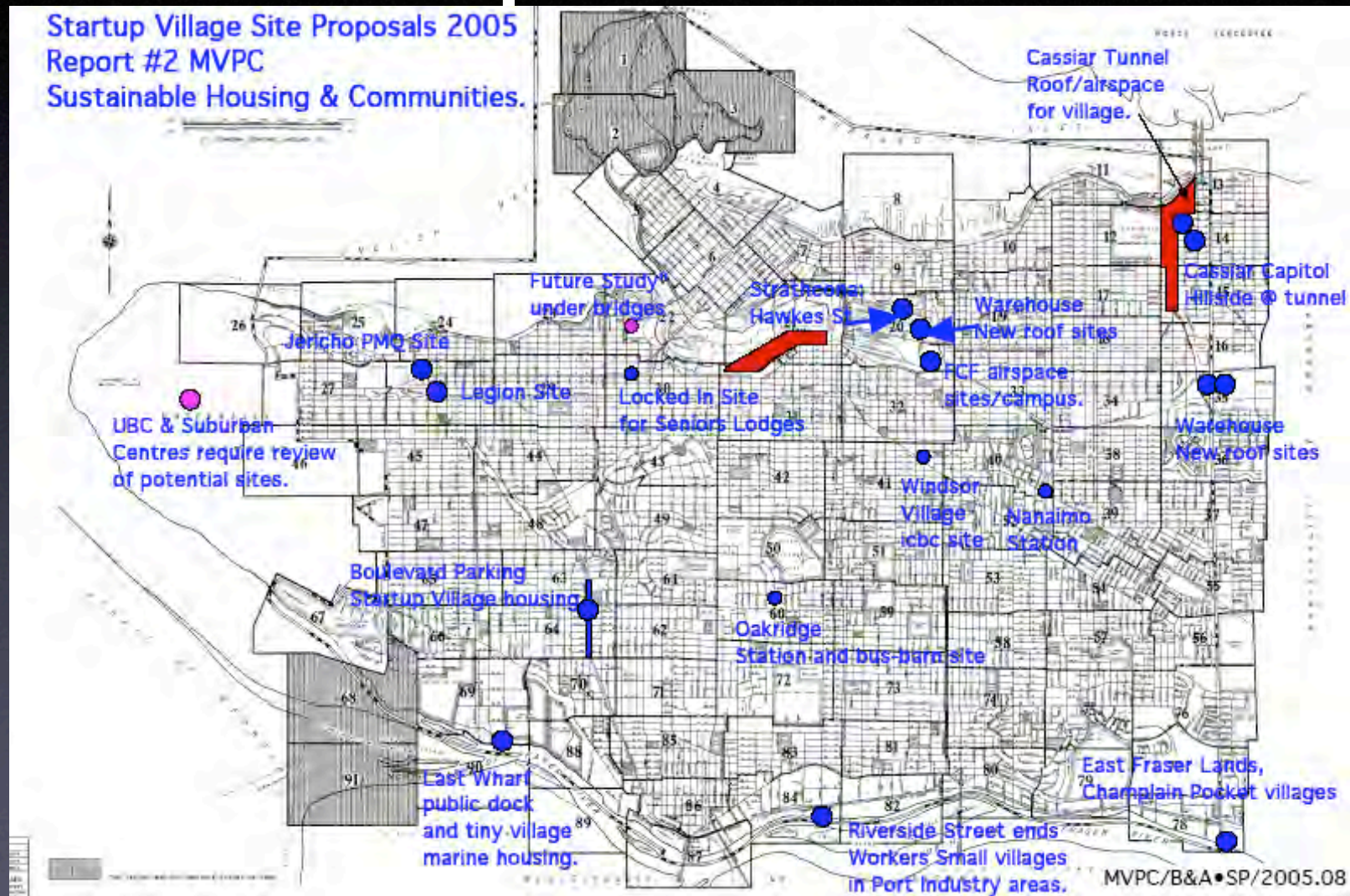
- Startup Villages at 100 units per acre but only 2 to 3 floors high, all on village streets makes housing affordable for all. (MVPC 1994)
- Reuse: such as containers now stockpiled here due to trade imbalance: an example of adaptive re-use.



More Vancouver Planning Questions

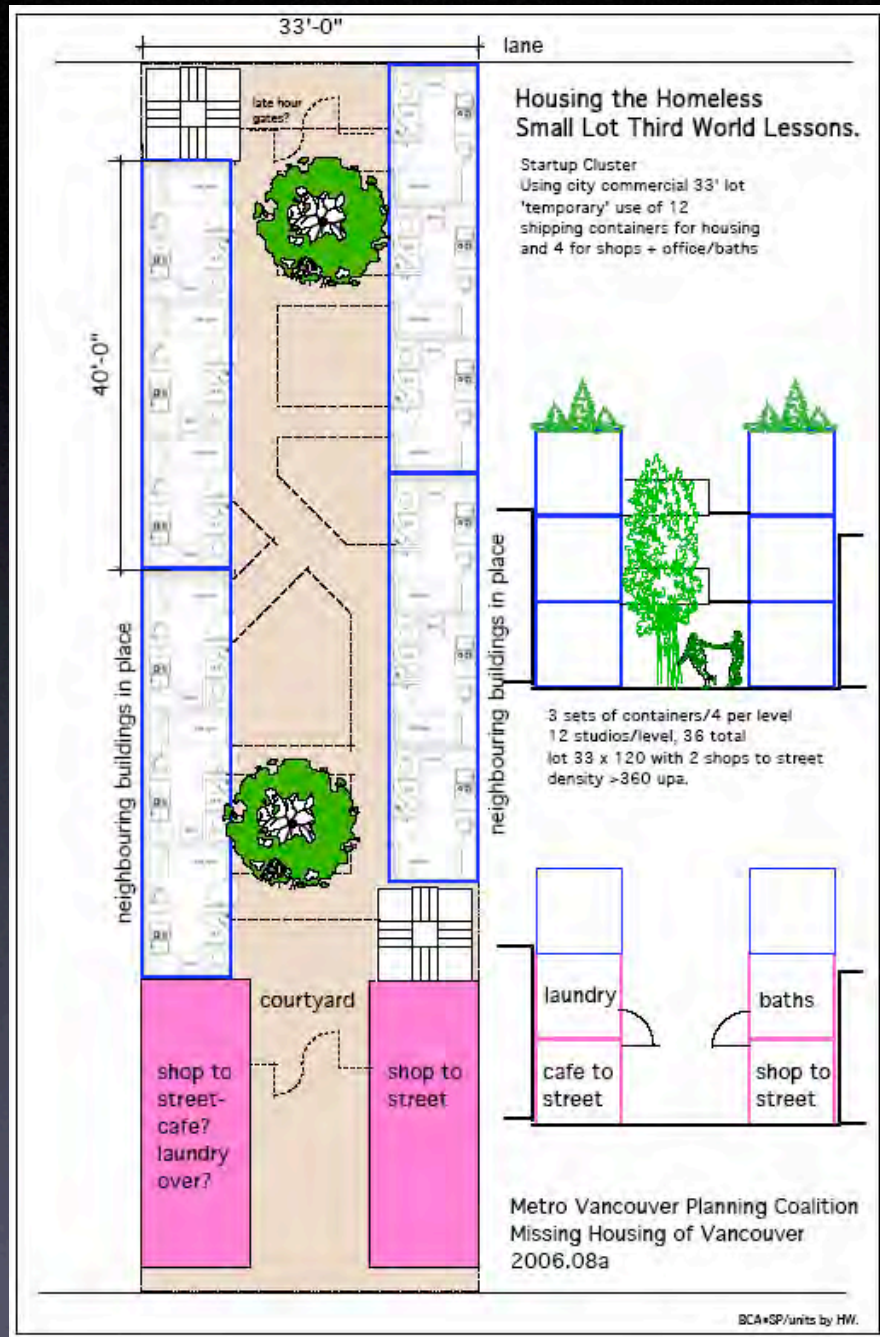
Startup Candidates

Startup Village Site Proposals 2005
Report #2 MVPC
Sustainable Housing & Communities.



Recycling Containers+

- Just one small thing to make use of idle assets.
- A major form of reuse in 3rd World
- No end to your imagination???

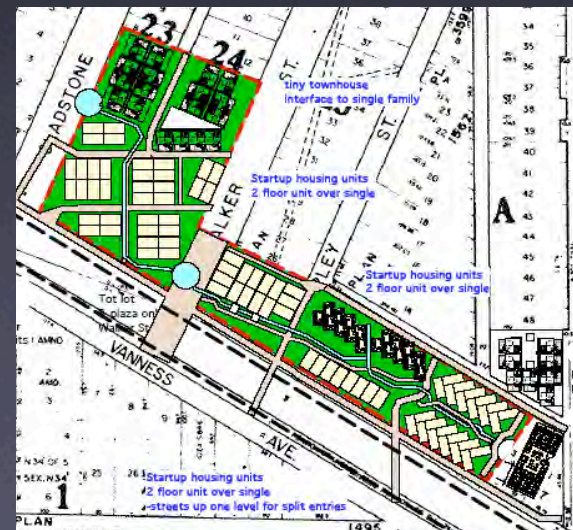
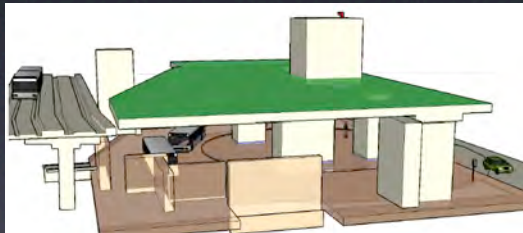
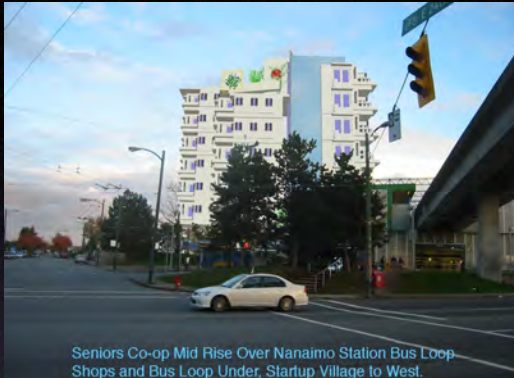


Public Land-Hidden Assets



- city owned lands: provide now for Startup Villages
- Integrate all level of government lands in land bank for integrated community plans
- Move new growth to hillside townsites
- Liberate airspace for new town & village developments
- Results: cut our urban footprint in half.

Example: Nanaimo Station



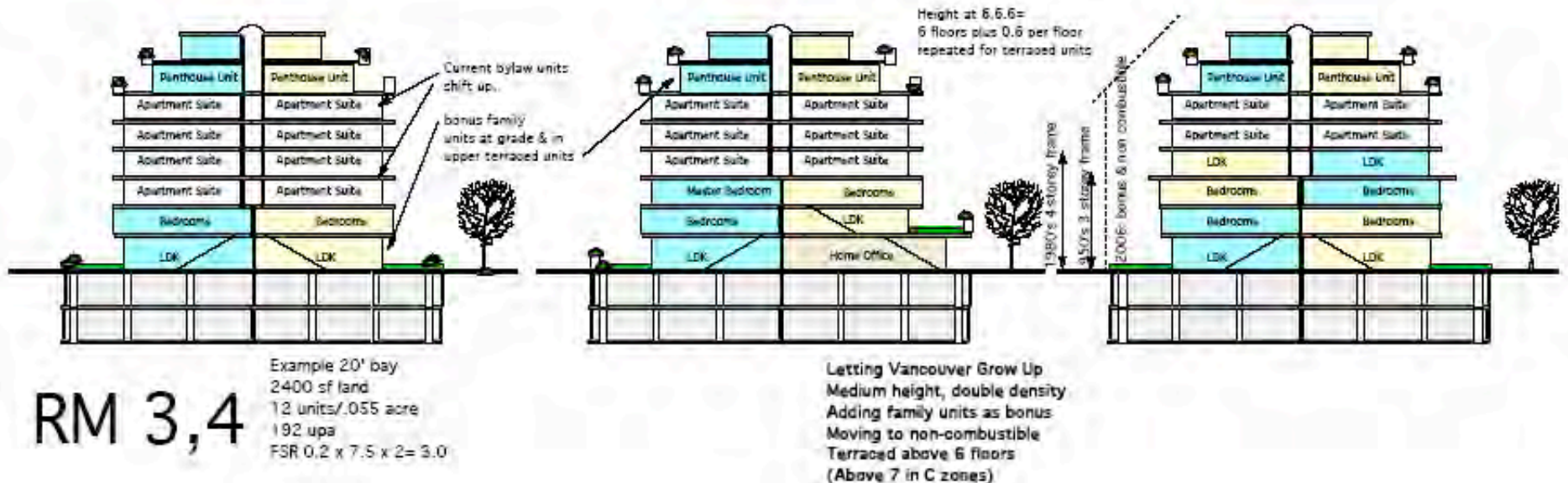
Startup Village/
Startup Housing

Where to start?



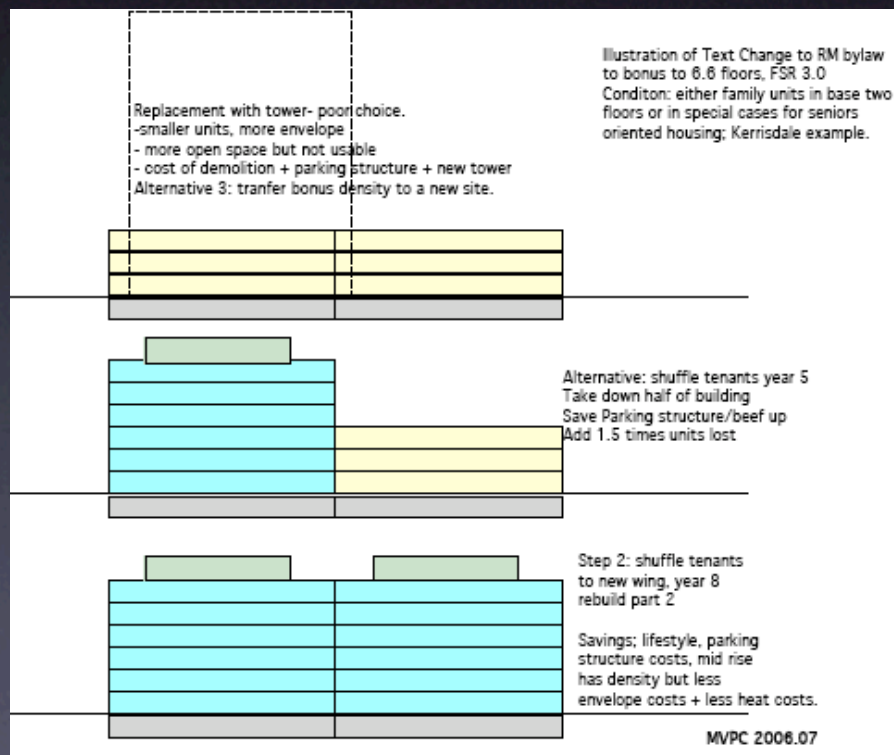
- Avoid area planning which targets areas of change & provokes unreasonable opposition.
- Use planning but don't wait for plans:
- Target bylaw amendments to make our zoning & policy papers move from land waste to Real Sustainable forms of housing & city.

Sustainable Apartments

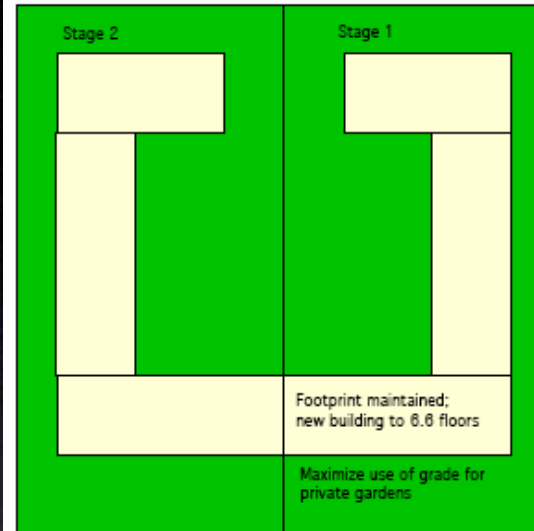


- Move RM zoning from 4 floors of frame to 6.6 floors in non-combustible on condition of providing the family housing at grade.

Remedial Sustainability



Eco-density and Savings in Mid rise Remedial Construction costs;
Moving RM zones to 6.6 floors
Green Building Policy Approaches.



Kerrisdale example but
applies to any RM condition

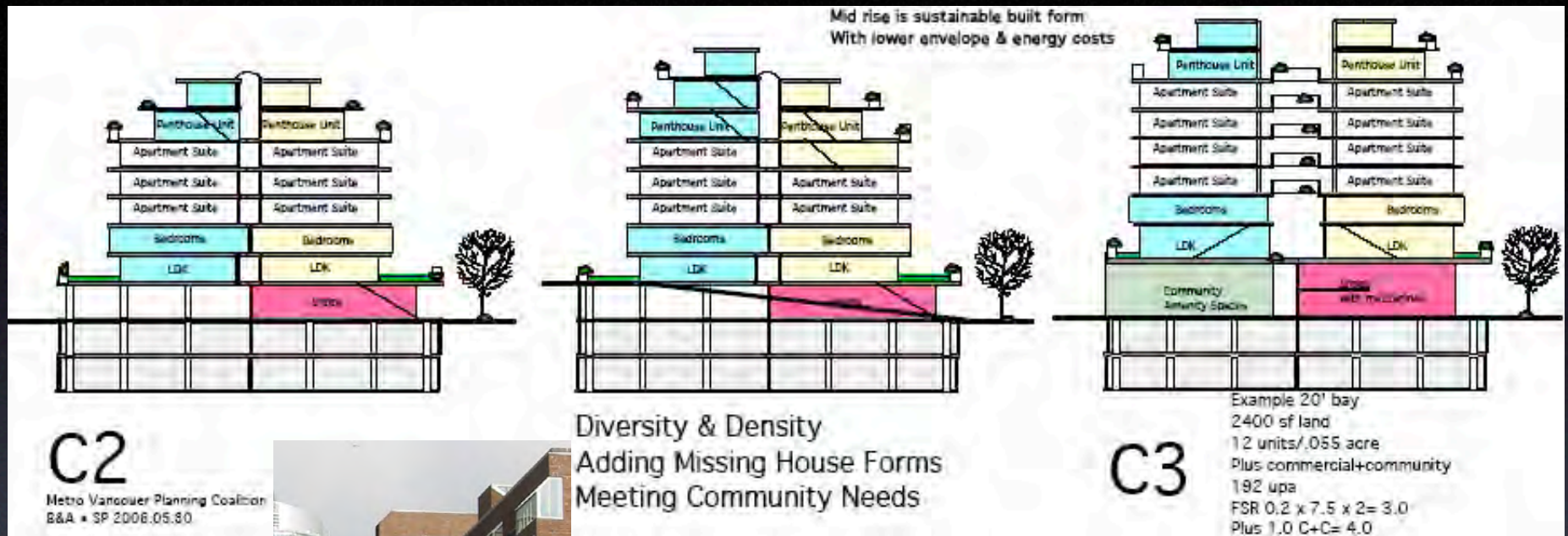
Issue: reducing parking structure cost
as vehicle ownership will drop from
Peak Oil Impact but also from increase
to this density will foster lower car
ownership. Seniors projects even more so.

Parking bylaw amendment: saving of
parking structure but doubling of density
permitted under bonus clauses in move
to 6.6 floors/FSR 3.0

Some remedial infill in RM zones
might use existing under-structure but
double density in new mid rise.

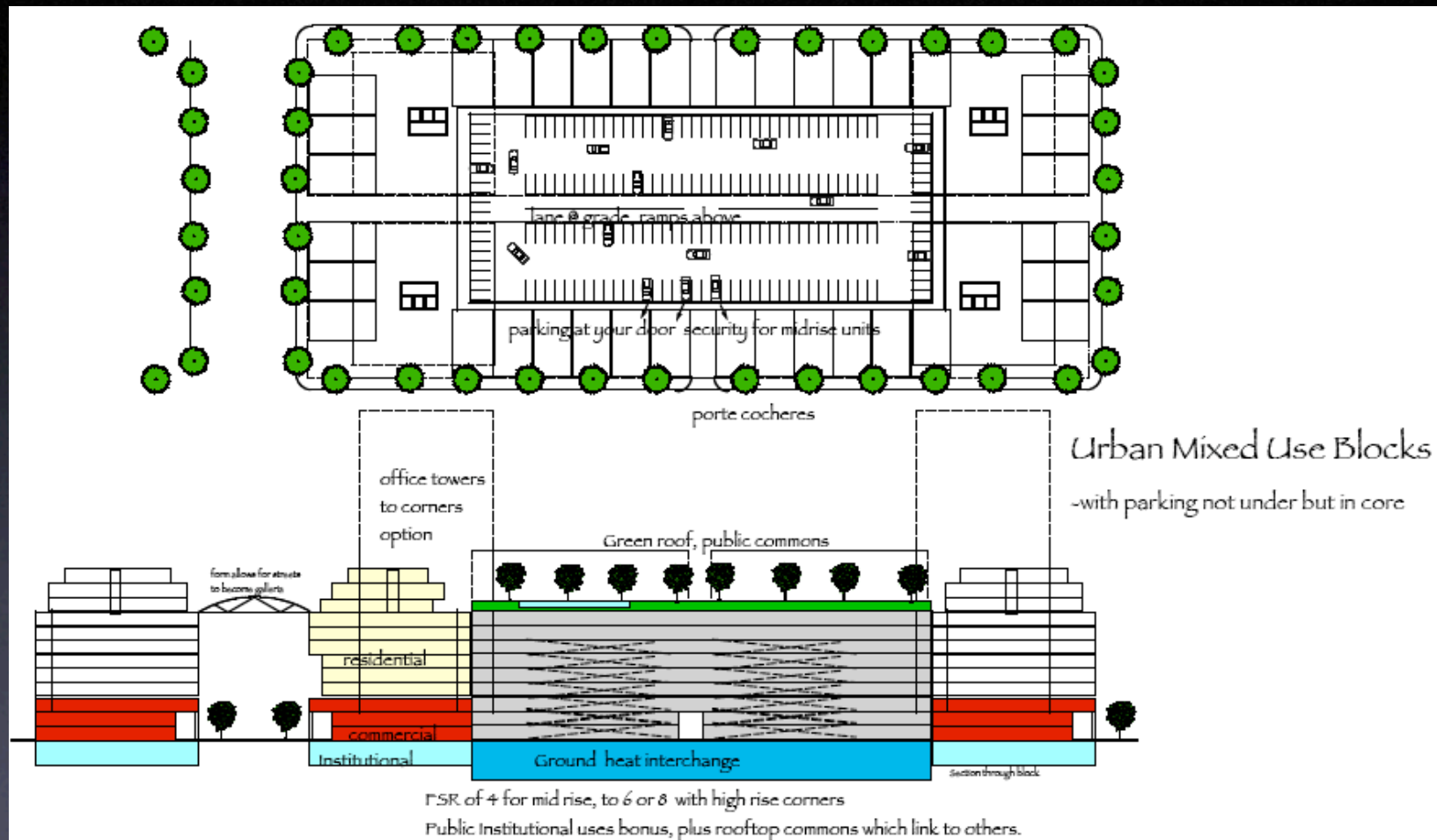


Real Urban Villages



- Move Commercial zones outside core to 6.6 floors & add the missing shoulder density to make transit & village commerce work.

Housing Hiding Mess?



Example: hiding warehousing, industry, using current wasted setbacks to big boxes.

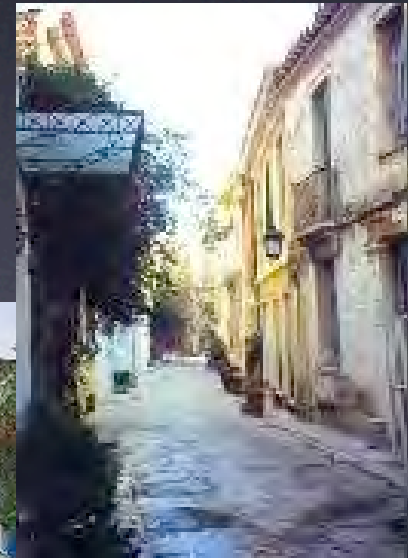
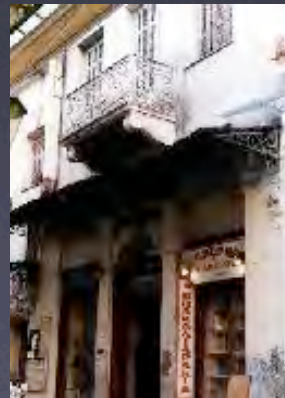
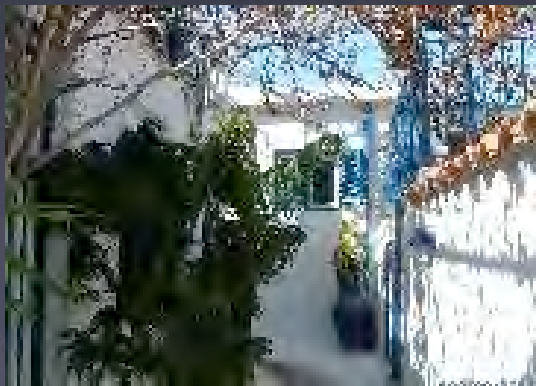
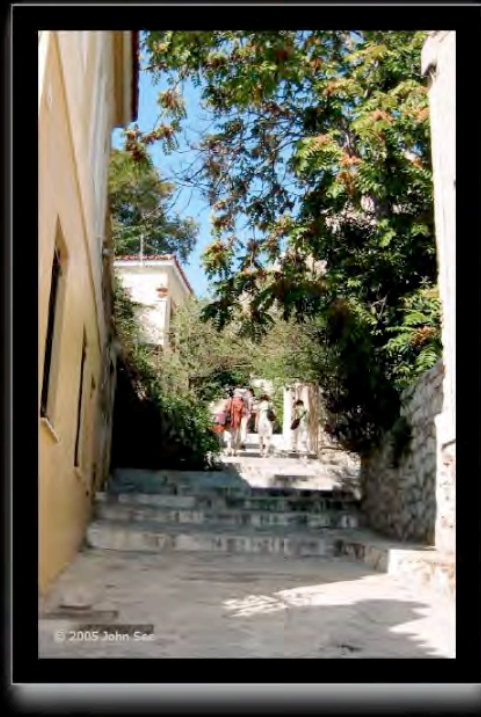
Reintegrating Industry



Triage: Downside Assets

- Be prepared for areas of density reversal;
- Make these area public assets, cushion the blow to those adversely affected.
- New green use on edges will form part of the new relocalized economy.
- Look to alternate forms of ownership & communal living to protect both land & the community.
- Learn from the Third World.....this time.

Land Conservation= Sustainable Community House, Garden, Street Village in the City



OUR Social Planning

- Economic adjustment to a Lean Market economy in the Post Cheap Oil era will mean we will have 'a new poor'.
- Cooperation at every level will be absolutely necessary to maintain city and local well being.

The Quantum Shift

Rebuilding Our Cities in Sustainable Patterns

BARRIERS TO A SUSTAINABLE CITY & HOUSING



School Marm's Approach To Zoning

 Failure-
of the City Itself

Unsustainable City
Unaffordable Housing
Resource Wasting Process
The 25% Surcharge.



Unaffordable, Unsustainable Process



Environmental Destruction by Default

I was here first
Go away
Do It After I'm Dead
I have heightened sense of entitlement
Who cares about your kids anyway



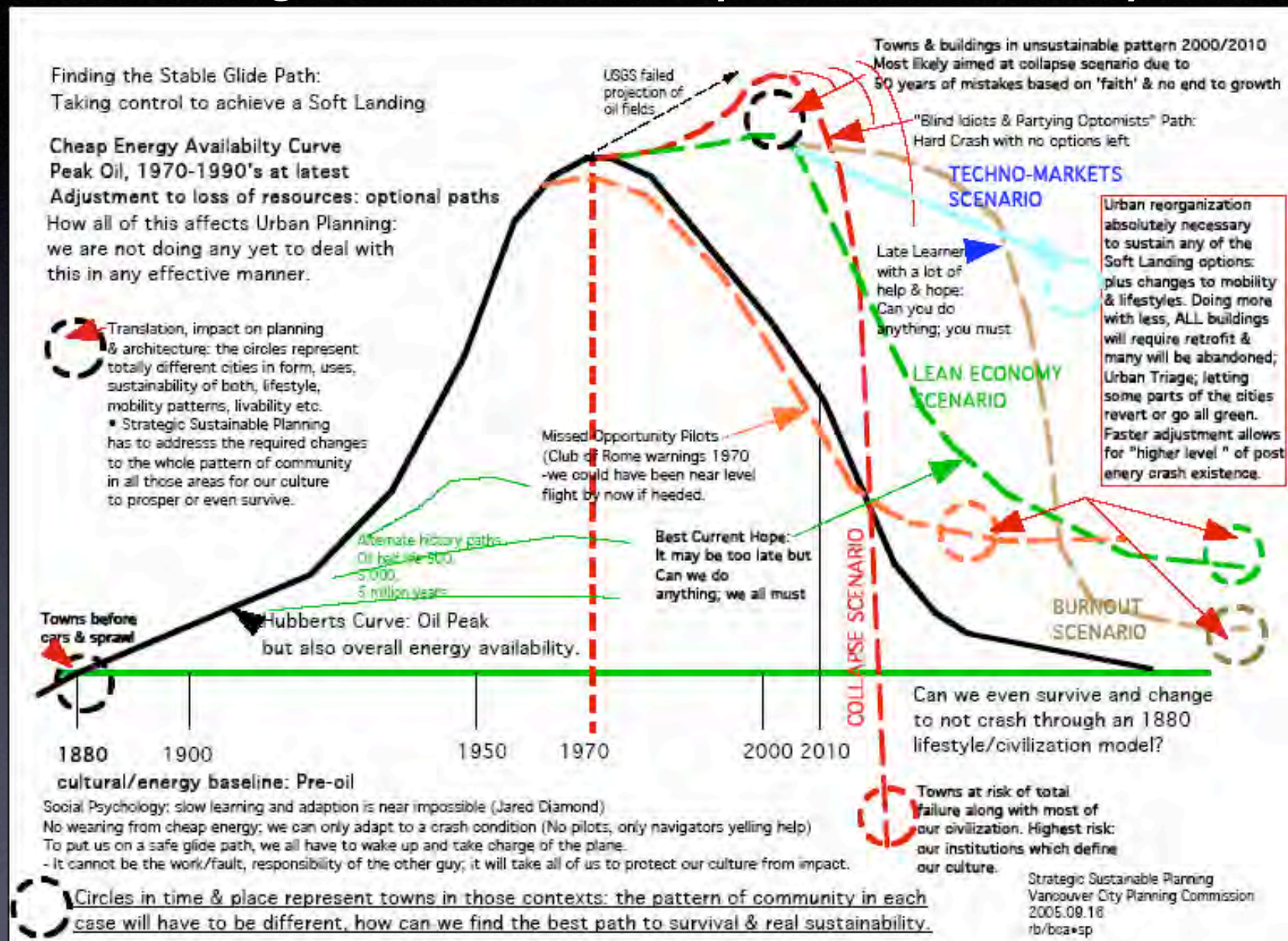
Failure of Institutions to Respond



Failure of Industry to Adapt

MVPC 2006

Reconfiguration of the City for Sustainability.



Hubbert's Curve & Cities

THE DEPLETION OF RESOURCES & THE IMPACT ON PATTERNS OF HUMAN SETTLEMENTS: THE NEED FOR LONG RANGE STRATEGIC SUSTAINABLE PLANNING

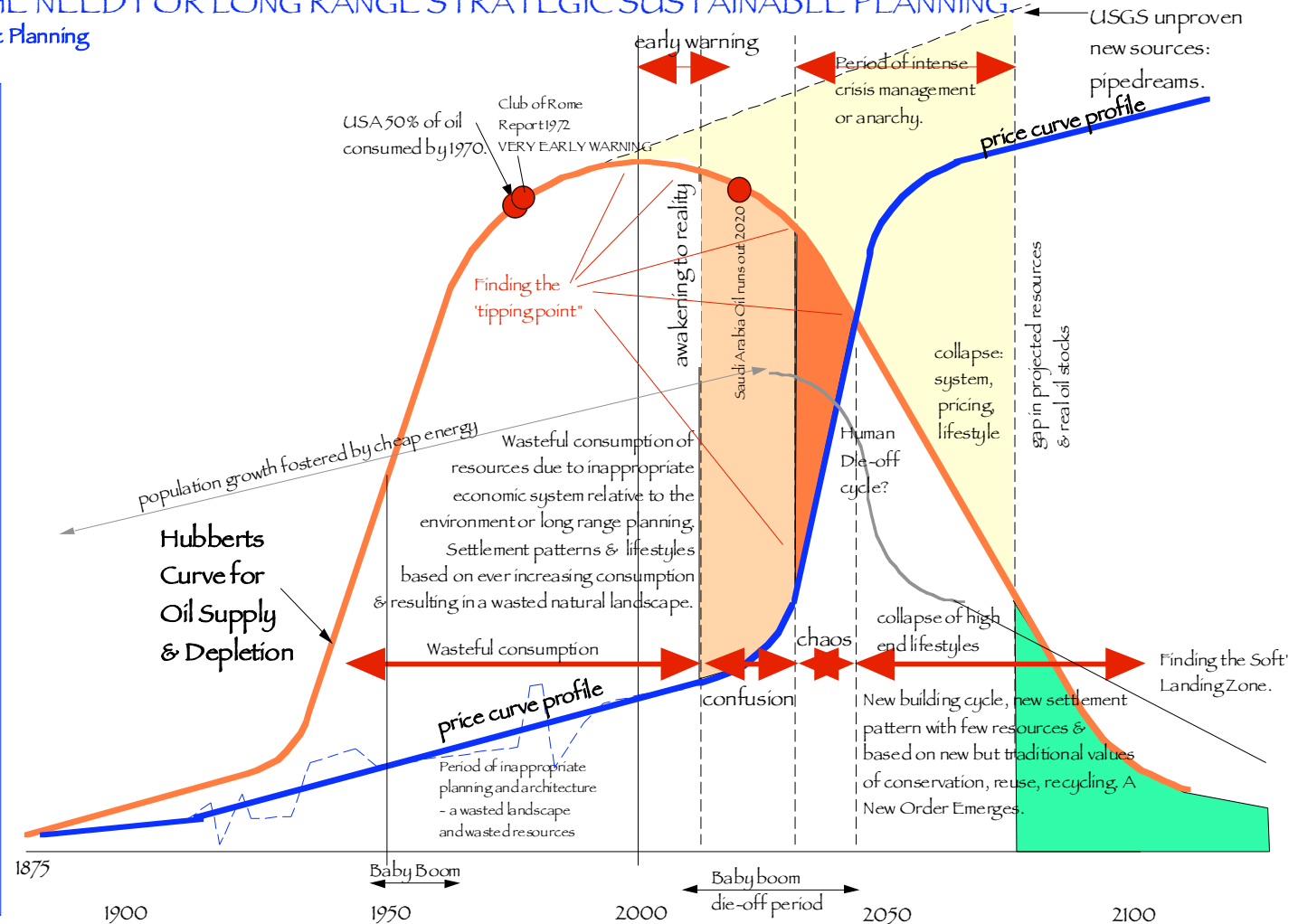
Balfour & Associates • Strategic Planning

2003.11, after Hubbert, Rees, rev 06.04

We are neglecting the design of appropriate patterns of settlement & transportation systems for the fast approaching new reality of energy scarcity & resource depletion.

We need strategies to deal with the following new realities:

- settlements will tend to be located in temperate climate zones & on higher ground.
- large sections of our existing cities will be abandoned as they are unsustainable. New appropriate concentrations of population will emerge as physical long range interaction becomes minimal.
- food production will return to restricted smaller areas and serving local needs.
- mass transit will be used for inter and intra city movement of people & goods.
- settlements will be comprised of smaller towns, smaller houses & narrower streets.
- localized industry, farming & market return. Proximity to food production, social networks & natural reserves will mark points of new community.





Urban Laboratory: The Marpole Example



Eco Density & the Marpole Laboratory

Marpole, Zoning with Text Amendments

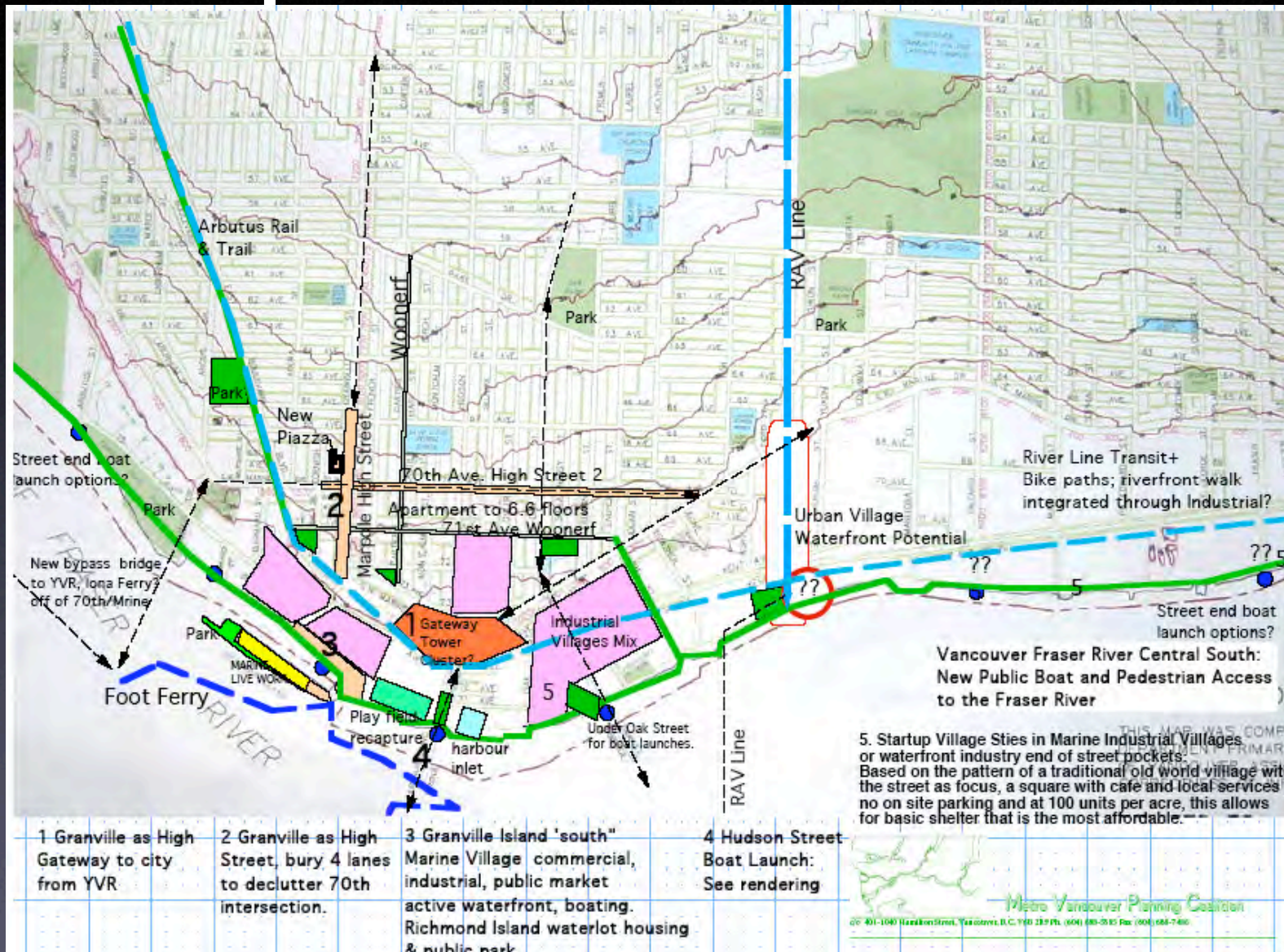
- 1. Core Commercial: moving to mid rise density, mixed use; 6.6 floors
- 2. RM 3&4: bonus density to 3.0 FSR & 6.6 floors for adding family base level townhouse units with gardens. Non combustible, durable buildings.
- 3. RT converting to rowhouse with fee simple subdivisions
- 4. RS: subdivision bylaw amendment on smaller frontages and lot areas to densify but with fee simple ownership of attached single family houses --controlled through subdivision bylaw text amendment and frontage control district map; conversion of arterials first, or by sub-district. (Not zoning ð)



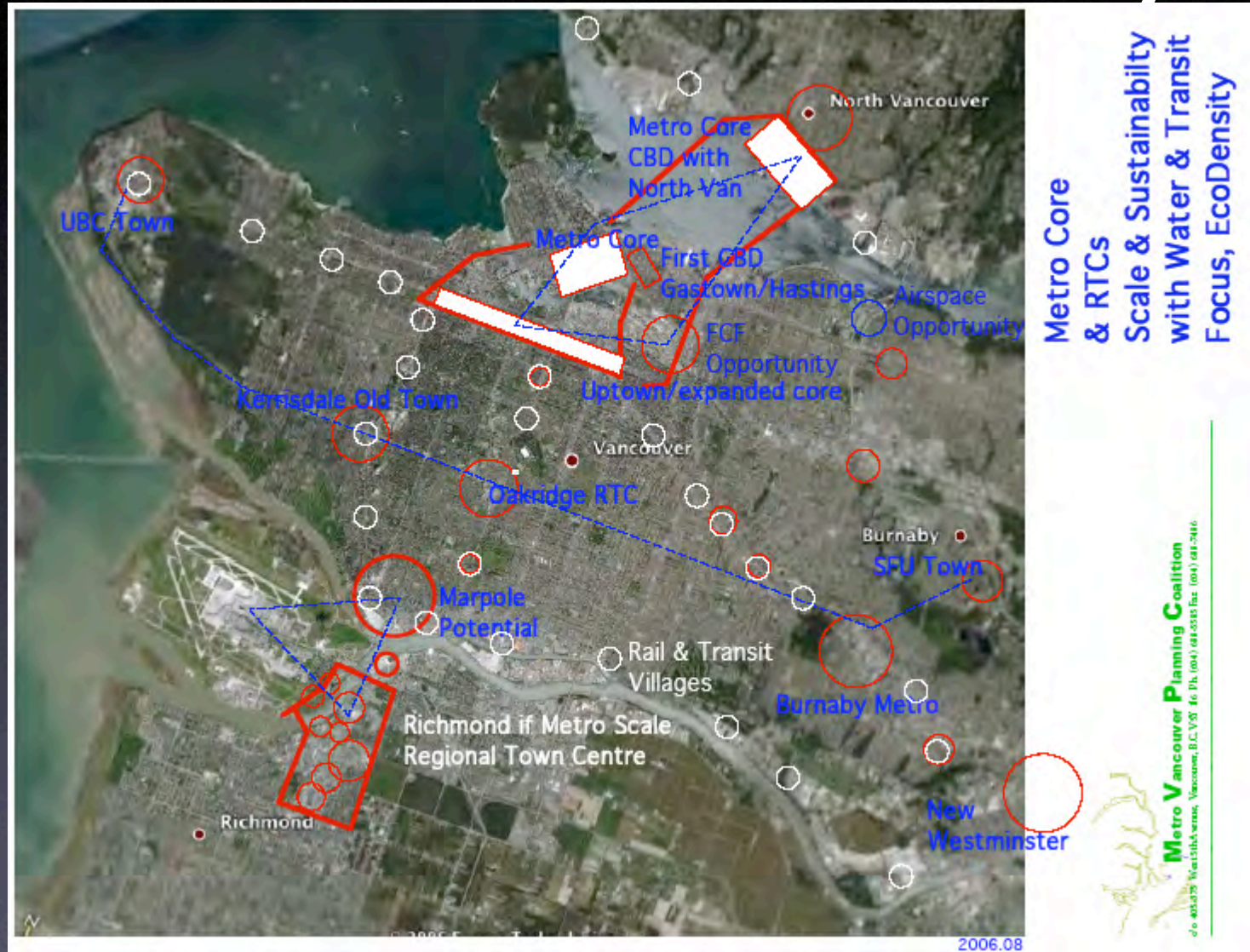
- 5. Richmond Island, part of Richmond; park, marine live work
- 6. Granville Island South Concept: mixing marine, artisan housing, retail, cultural, guild house mixed use small lot subdivision for startup industries
- 7. Marpole Village industry; adding smaller scale frontage and edge uses to streets for both local scale and new local industry for Marpole
- 8. Making the riverfront and other public realm areas integrated & livable.
- 9. Capturing industrial airspace for other public benefits; Translink example
- 10. Controlling big box & highway commercial to make them more sustainable and integrated into the community.
- 11. Rethinking all riverfront industry options for more traditional & community oriented scale and mix of uses.
- 12. Looking for integration with Richmond & YVR river functions.

MVPC 2006.07.23

Marpole OldNewTown



From Suburb to City



Mutation to Sustainability: new urban + new green

Metro Vancouver Planning Coalition

Airspace Townsites

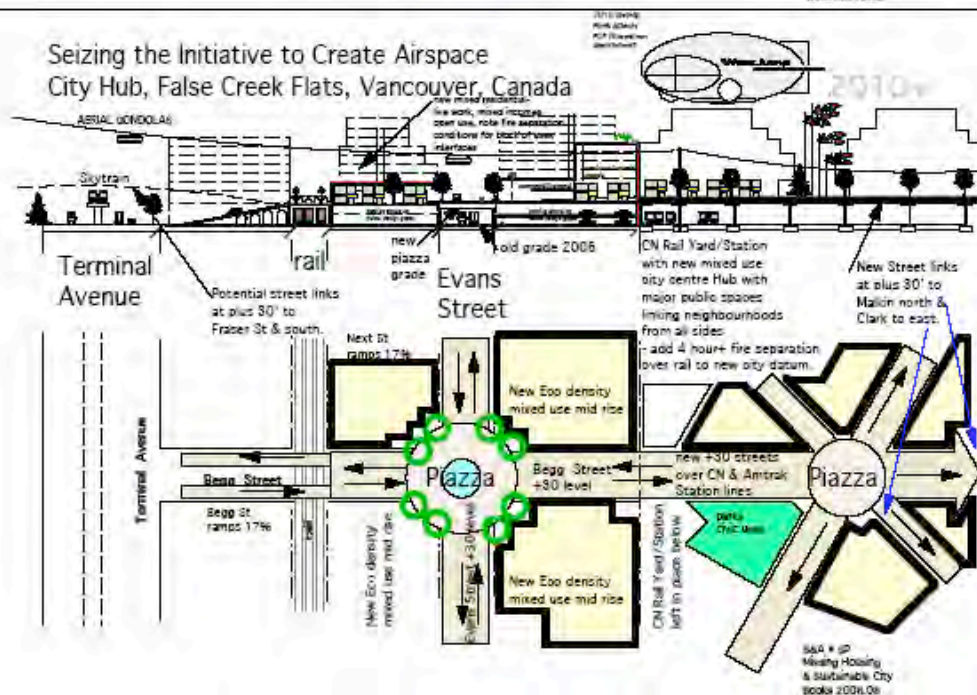
Seizing the Initiative to Create Airspace
City Hub, False Creek Flats, Vancouver, Canada

2005+



Seizing the Initiative to Create Airspace
City Hub, False Creek Flats, Vancouver, Canada

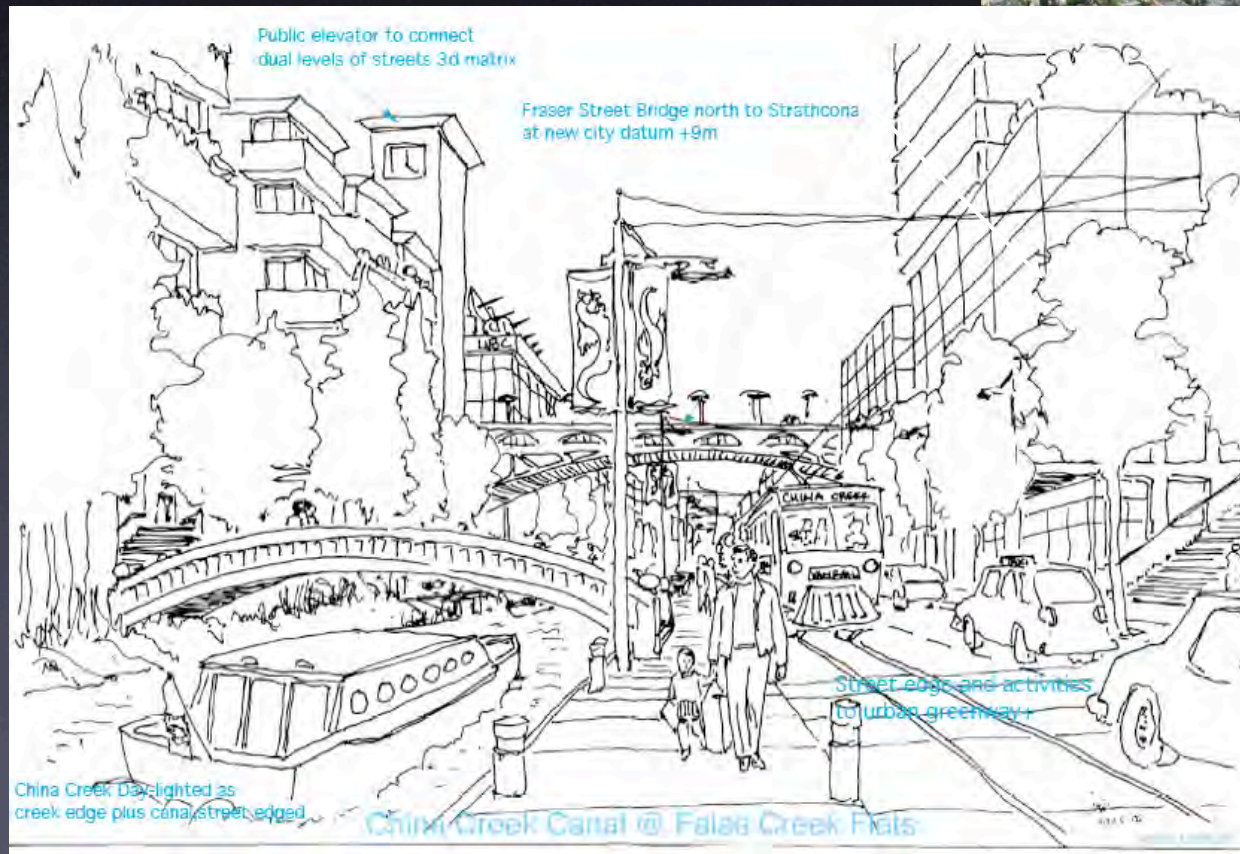
2010+



False Creek CN Example:
Others: Cassiar Interchange
Abbotsford rail corridor
Coquitlam, Mission, North Van

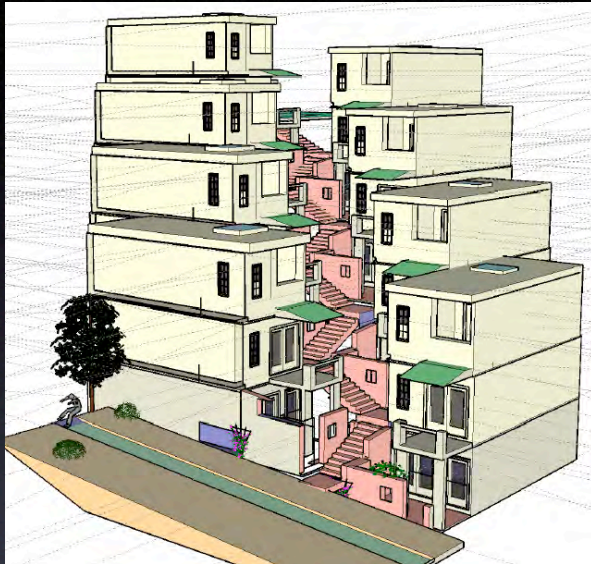
More Vancouver Planning Questions

Airspace Centre?



- Hole in donut
- 160 acres+

Airspace Town: Cassiar



- 1. Spaces Left Over After Planning (SLOAP)
- 2. But also: whole SLOAPs consolidated.
- 3. Cassiar: 10,000 units, area equal to South East False Creek!



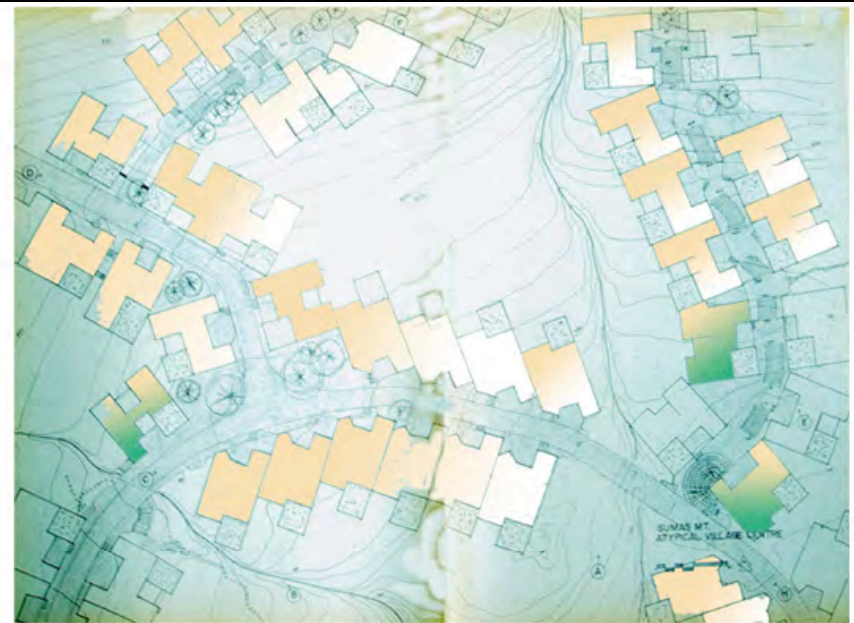
Airspace & Hill-towns



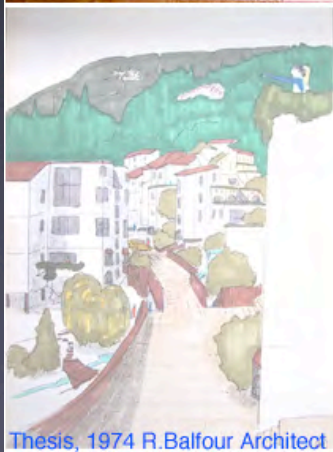
- Shift growth to North Shore & Howe Sound mountain villages and new towns.
- Hill newtowns of valley north shore; Burke mountain, Silver Valley, Thorn Hill, Mission Hills, Harrison Hills
- Hill towns of south shore: Sumas Mountain, Chilliwack mountain, Ryder Lake, Majuba & Vedder Mountain



75% of BC- hilltowns+



Sumas Mountain Newtown: Urban Villages, interlaced with Parks



Thesis, 1974 R.Balfour Architect



Vancouver North



- Mountain Villages, a B.C. New Tradition.
- What are we waiting for, a flood?

Maritime city: housing on water? Why NOT?



Maritime Service Villages for the
New Maritime Nomads?

Conclusion:

- We do not have a land shortage but an imagination shortage.
- the Burrard Peninsula could comfortably contain the Metro population with room to spare and more green areas as well
- Reducing our footprint need not be painful but will yield major social & environmental benefits
- This requires new attitudes & cooperation

ECOLOGY

ECO-DENSITY
ECO-DENSITY

ECO-DENSITY

ECO-DENSITY
ECO-DENSITY

DENSITY



COMPASSION IN ARCHITECTURE, RESPECT FOR TRADITION HEALING THE WORLD SAVING THE ENVIRONMENT- WALKING SOFTLY & CARRYING A BIG RESPONSIBILITY

More Vancouver Planning Questions