

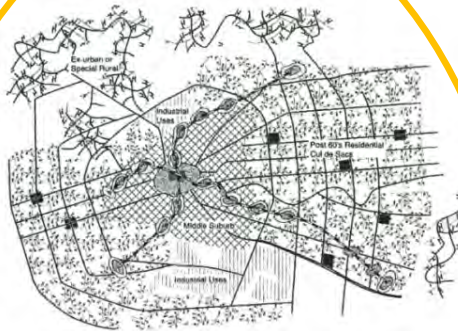
UF - Kolme kaupunkijärjestelmää
ajattelutapa – **malli** – teoria

SYKE, Helsinki 25.10.2013

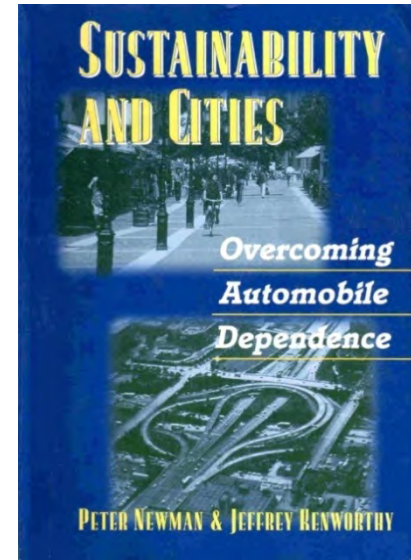
Newman



Ajattelu



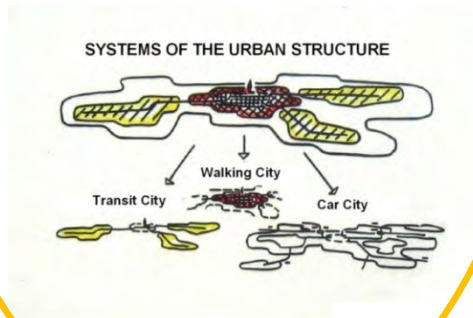
Kaupunkimallit



Kaupunkiteoria



Kosonen



Kolme kaupunkijärjestelmää

Ajattelu – mallit - teoria

Kaupunkiteoria



”Kuopion malli” ja ”Future City”

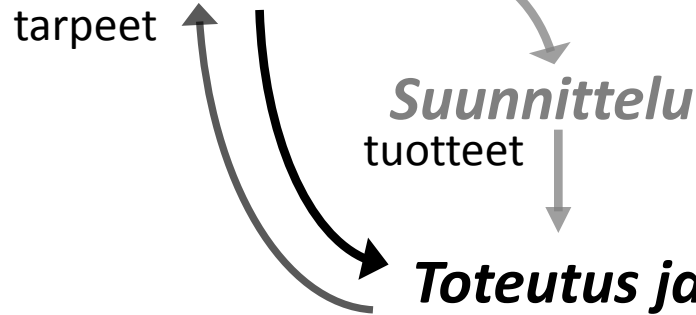


Ajattelutapa

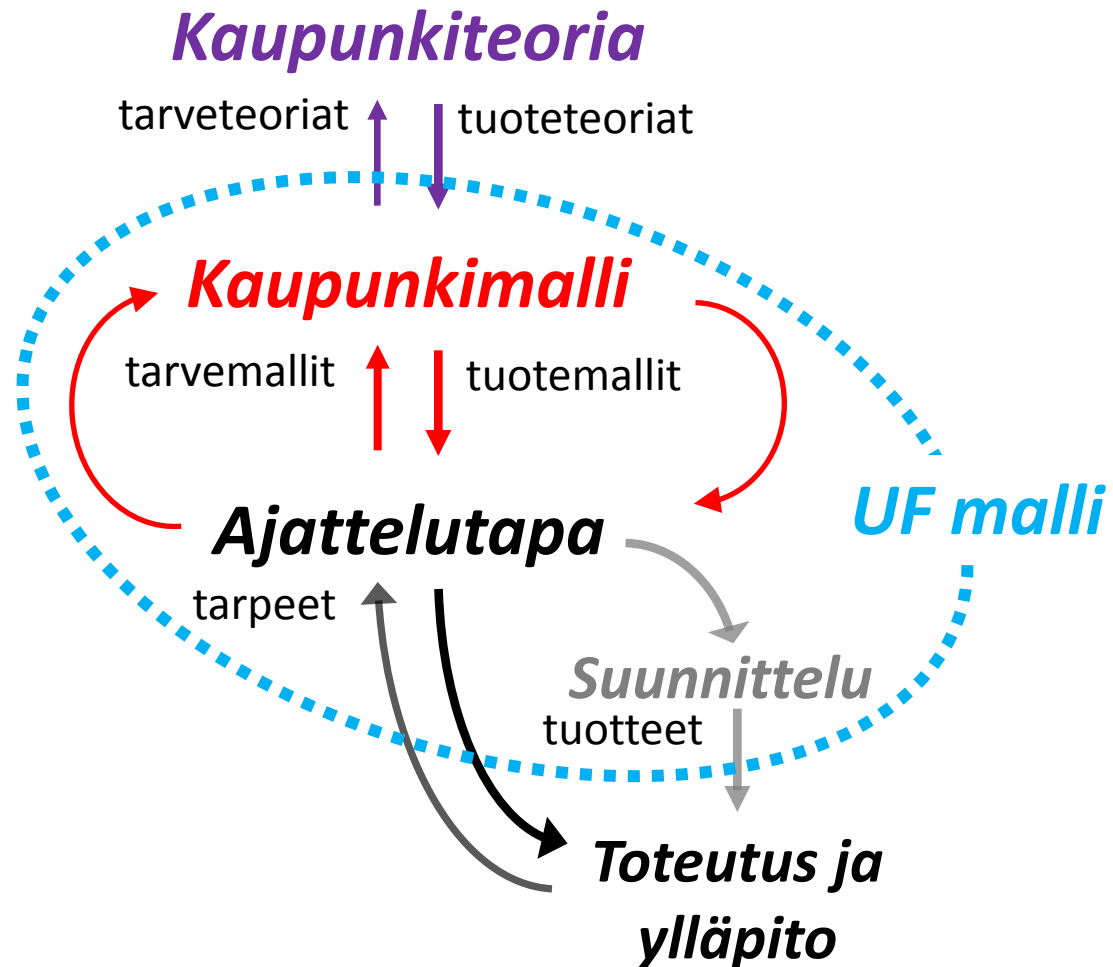
tarpeet

Suunnittelu
tuotteet

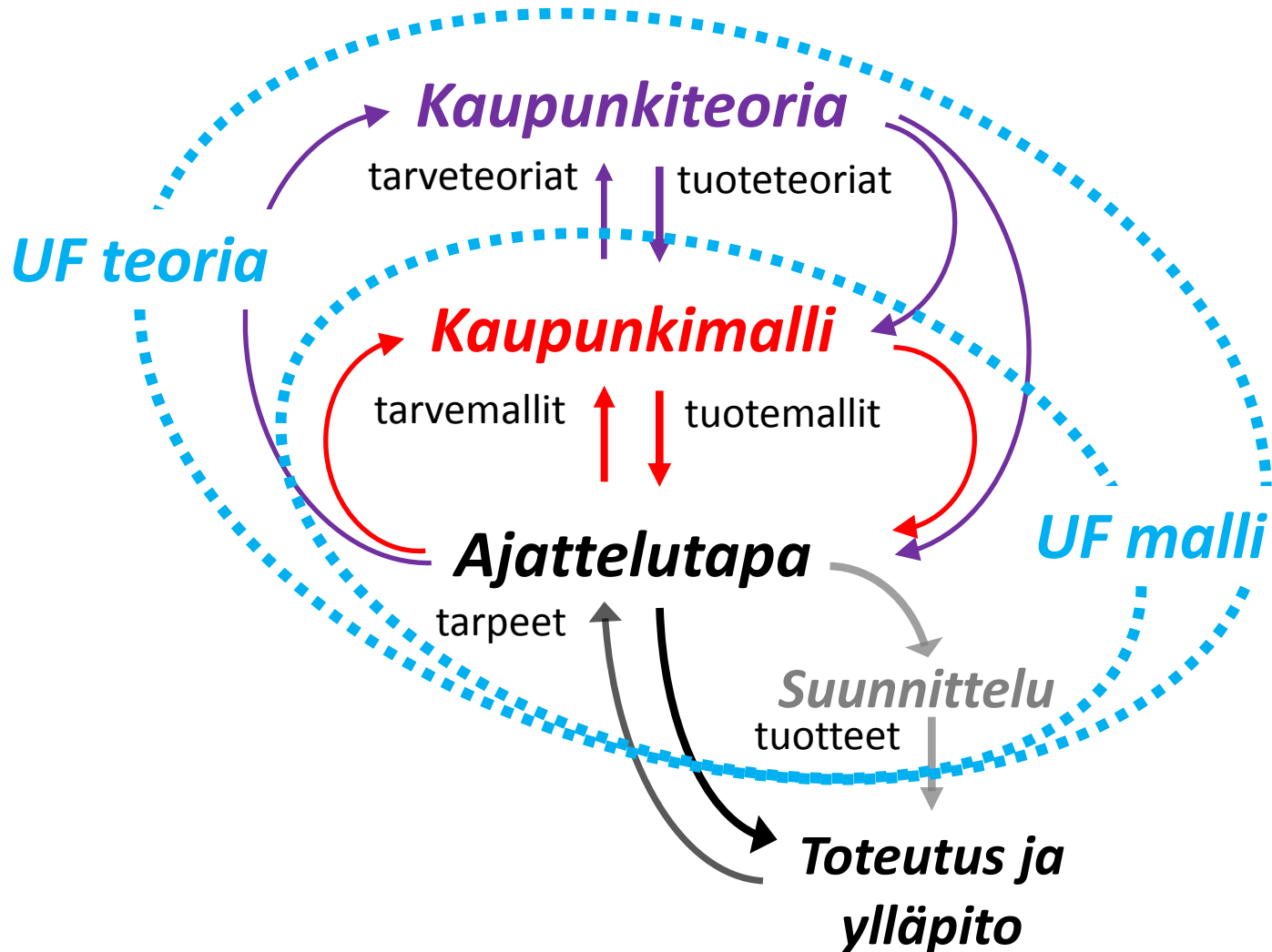
**Toteutus ja
ylläpito**



Kolme kaupunkijärjestelmää ajattelu – malli - teoria



Kolme kaupunkijärjestelmää ajattelu – malli - teoria



Uuden ajattelun tarve

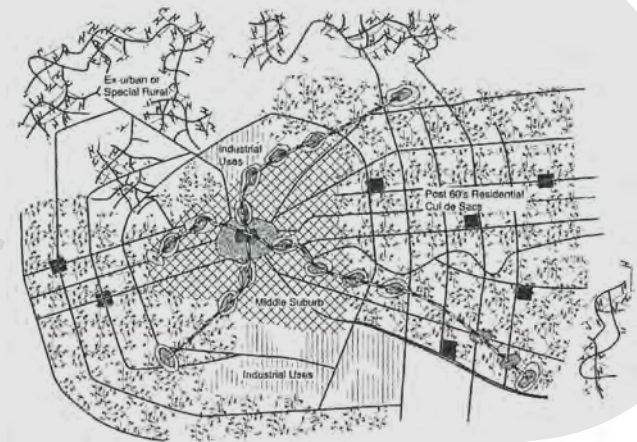
CIAM 1933
Modern City

PERINTEINEN AJATTELU

Uusi kaupunki

Liikenne

*Asuminen
Työnteko
Virkistys
Keskusta*



CIAM 1933
Modern City

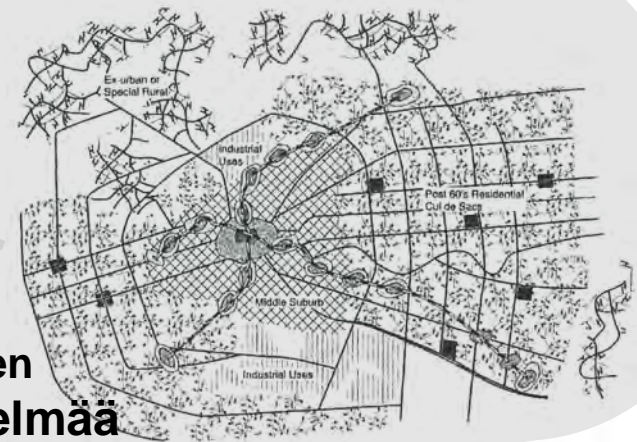
PERINTEINEN AJATTELU
2 pääjärjestelmää

Liikenne

*Liikenne- ja
verkostomallit,
teoriat*

Maankäyttö

*Kaupunki- ja
maankäyttömallit
teoriat*



Kaupungit 1950 alkaen
Kolme kaupunkijärjestelmää
3 järjestelmää

Jalankulku-, joukkoliikenne- ja autokaupunki

CIAM 1933
Modern City

PERINTEINEN AJATTELU
2 pääjärjestelmää

Liikenne

*Liikenne- ja
verkostomallit,
teoriat*

Maankäyttö

*Kaupunki- ja
maankäyttömallit
teoriat*

Uudistuvaan kaupunkiin
suuntautuvat maankäyttö- ja
liikennemallit **eivät ota**
huomioon kaupunkijärjestelmiä

Kaupungit 1950 alkaen
Kolme kaupunkijärjestelmää
3 järjestelmää

Jalankulku-, joukkoliikenne- ja autokaupunki



CIAM 1933
Modern City

PERINTEINEN AJATTELU
2 pääjärjestelmää

Liikenne

Liikenne- ja
verkostomallit,
teoriat

Maankäyttö

Kaupunki- ja
maankäyttömallit
teoriat

Ei kokonaisteoriaa

Uudistuvaan kaupunkiin
suuntautuvat maankäyttö- ja
liikennemallit eivät ota
huomioon kaupunkijärjestelmiä

Kaupungit 1950 alkaen
Kolme kaupunkijärjestelmää
3 järjestelmää

Jalankulku-, joukkoliikenne- ja autokaupunki



Ajattelutapa

Kolme kaupunkijärjestelmää

(Urban Fabrics)

Innovaatioiden aallot

Kaupunkijärjestelmien historia

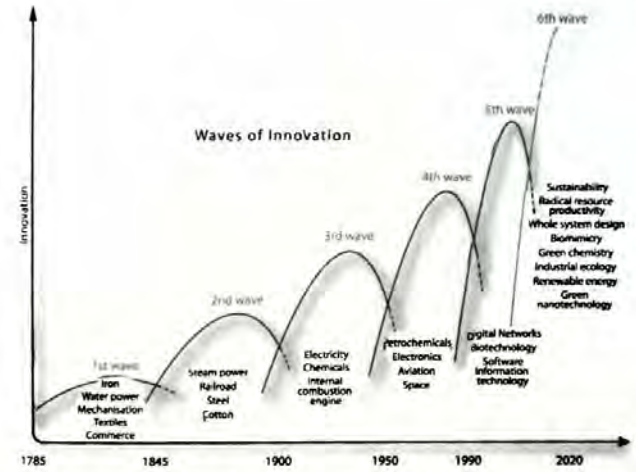
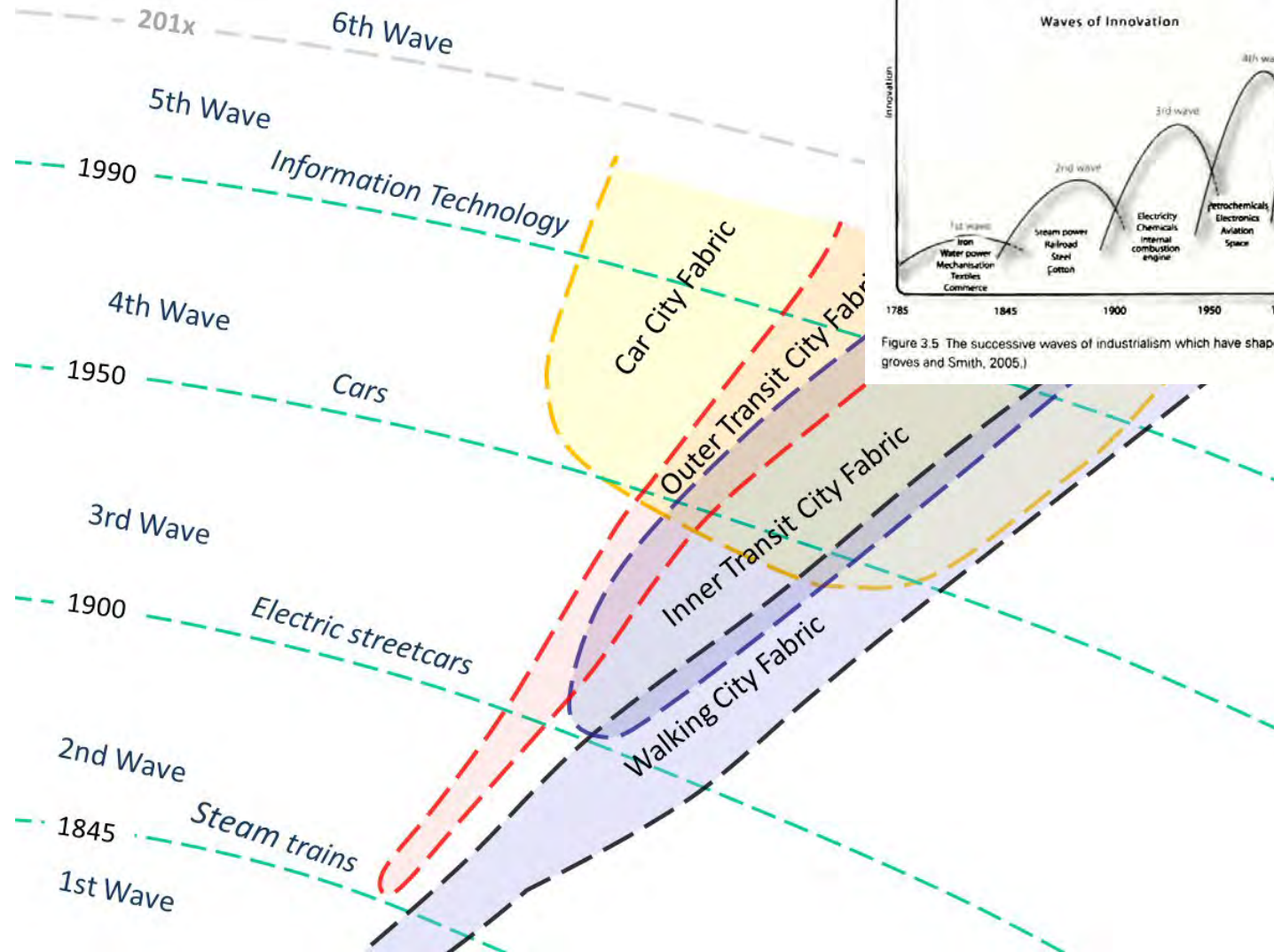
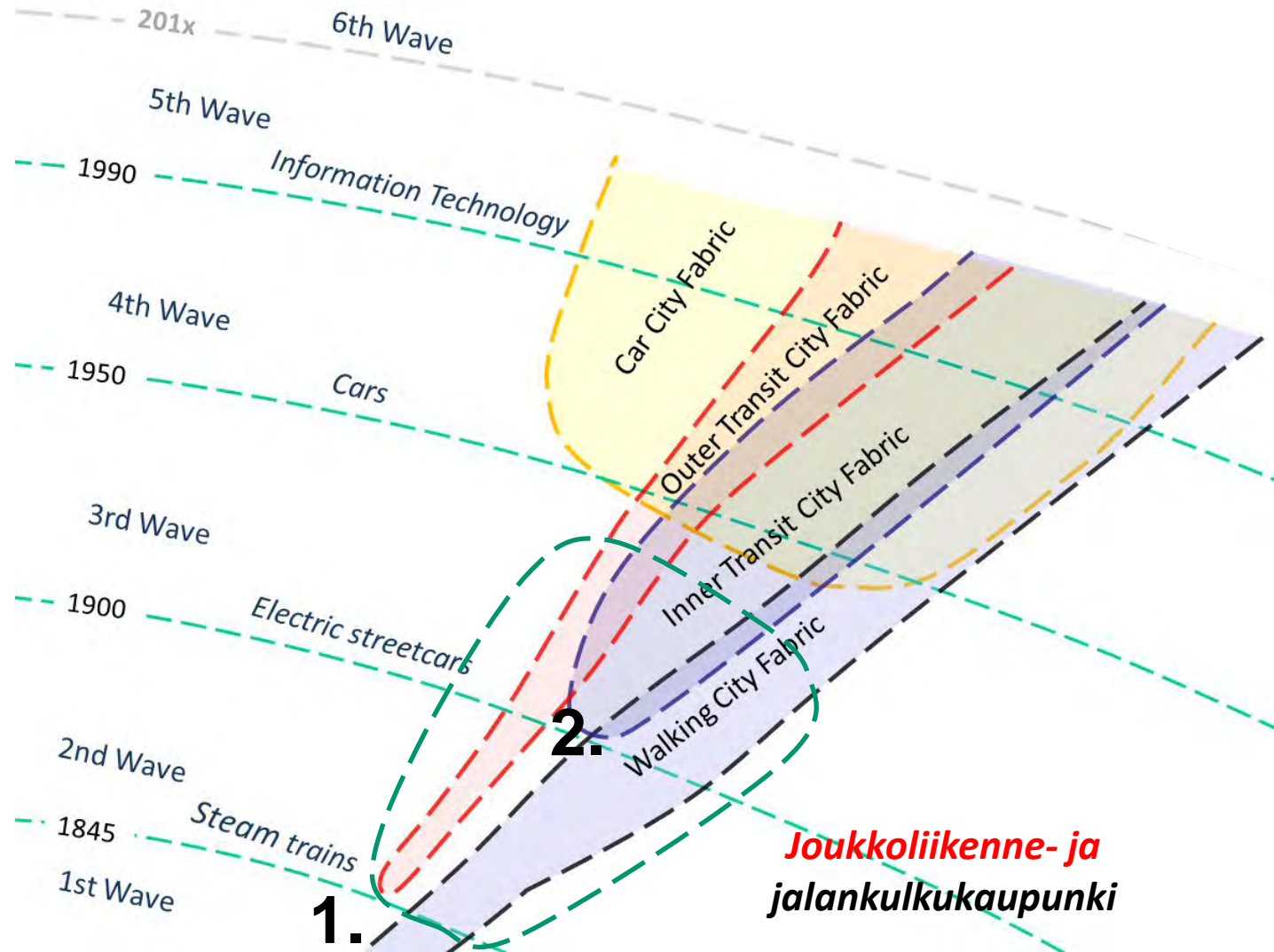


Figure 3.5 The successive waves of industrialism which have shaped cities. (Credit: Hargroves and Smith, 2005.)

Innovaatioiden aallot

Kaupunkijärjestelmien historia

Kaupunkikehityksen pääjaksot ennen 1950-lukua

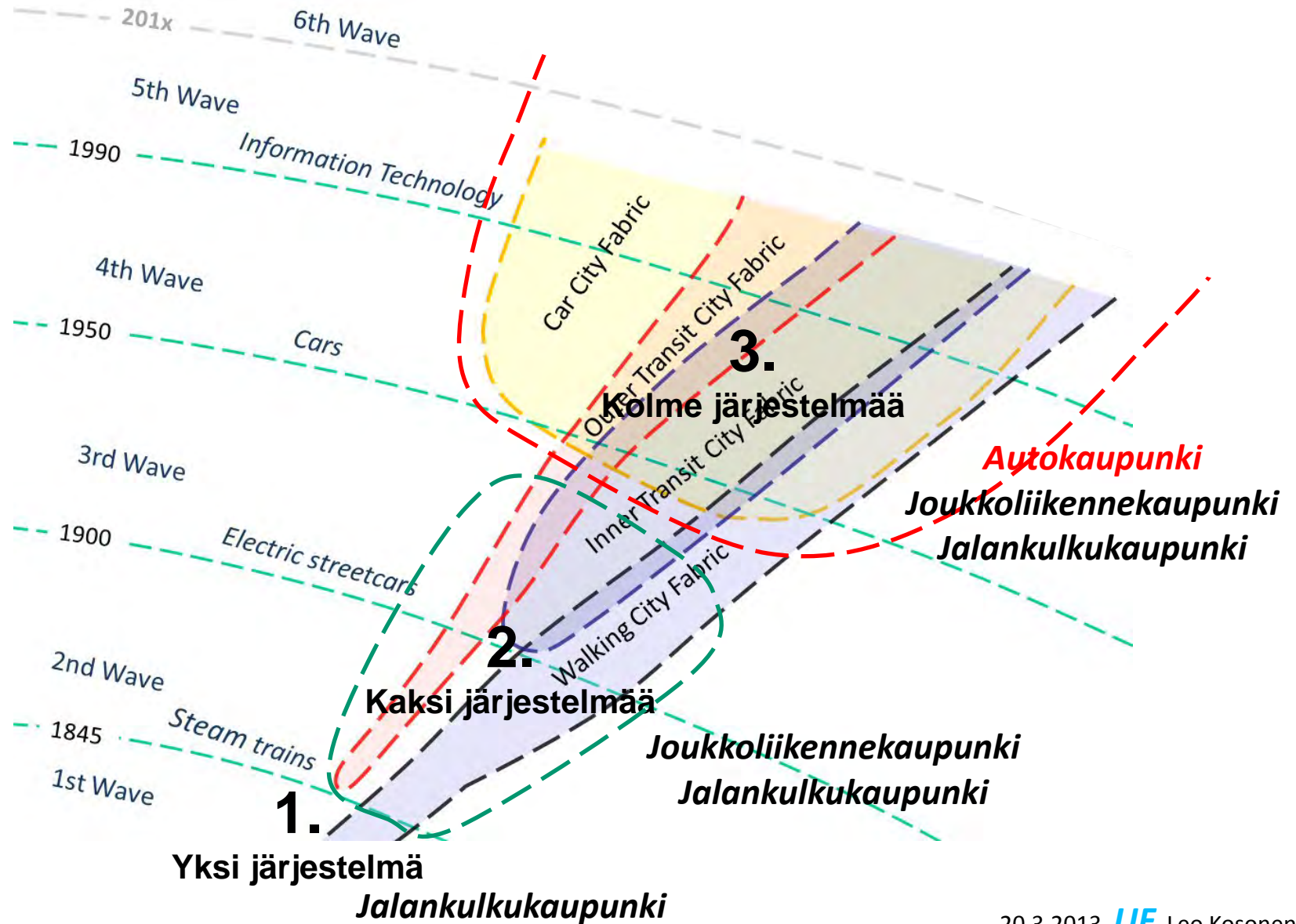


Jalankulkukaupunki

Innovaatioiden aallot

Kaupunkijärjestelmien historia

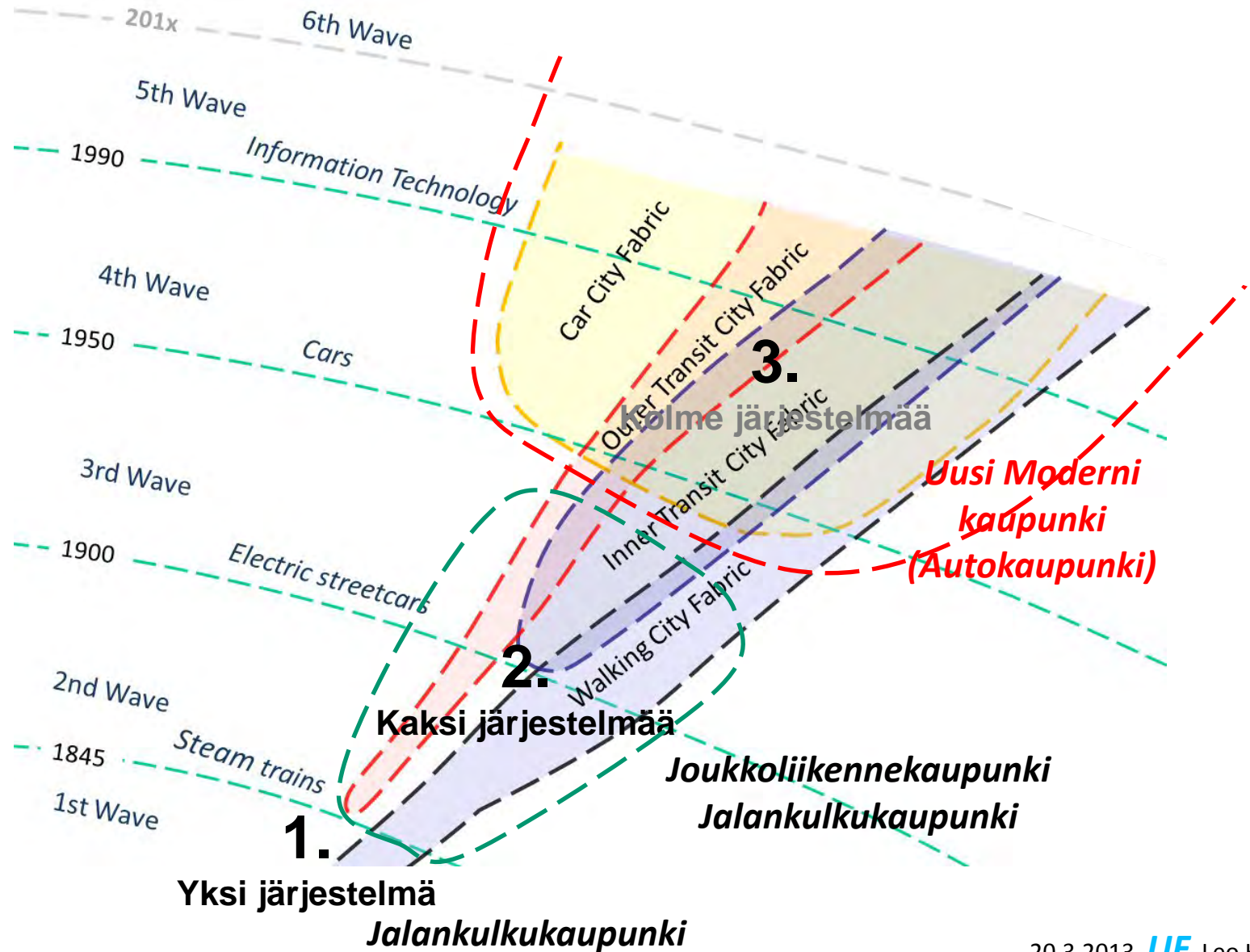
Kaupunkikehityksen nykyinen pääjakso



Innovaatioiden aallot

Kaupunkijärjestelmien historia

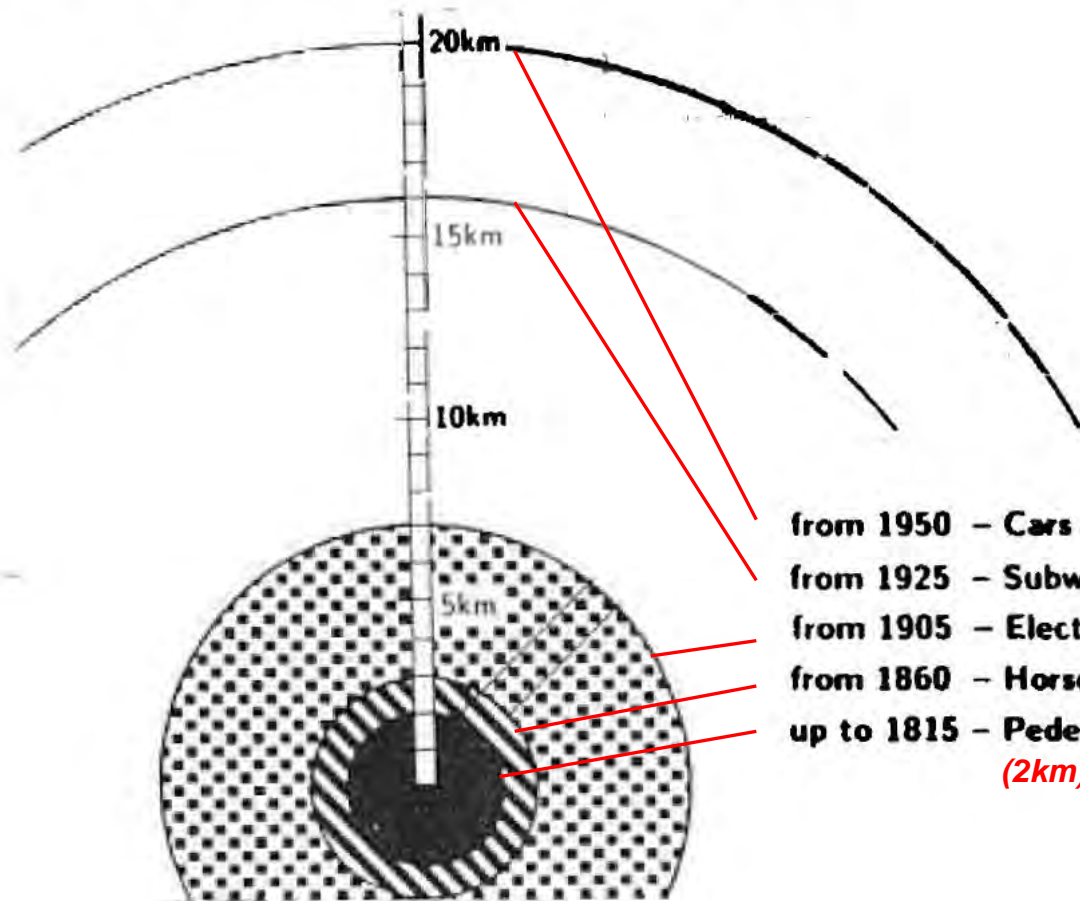
Sekaannuksen aika



ANTHROPOLOGICAL INVARIANTS IN TRAVEL BEHAVIOR

"Daily Radius"

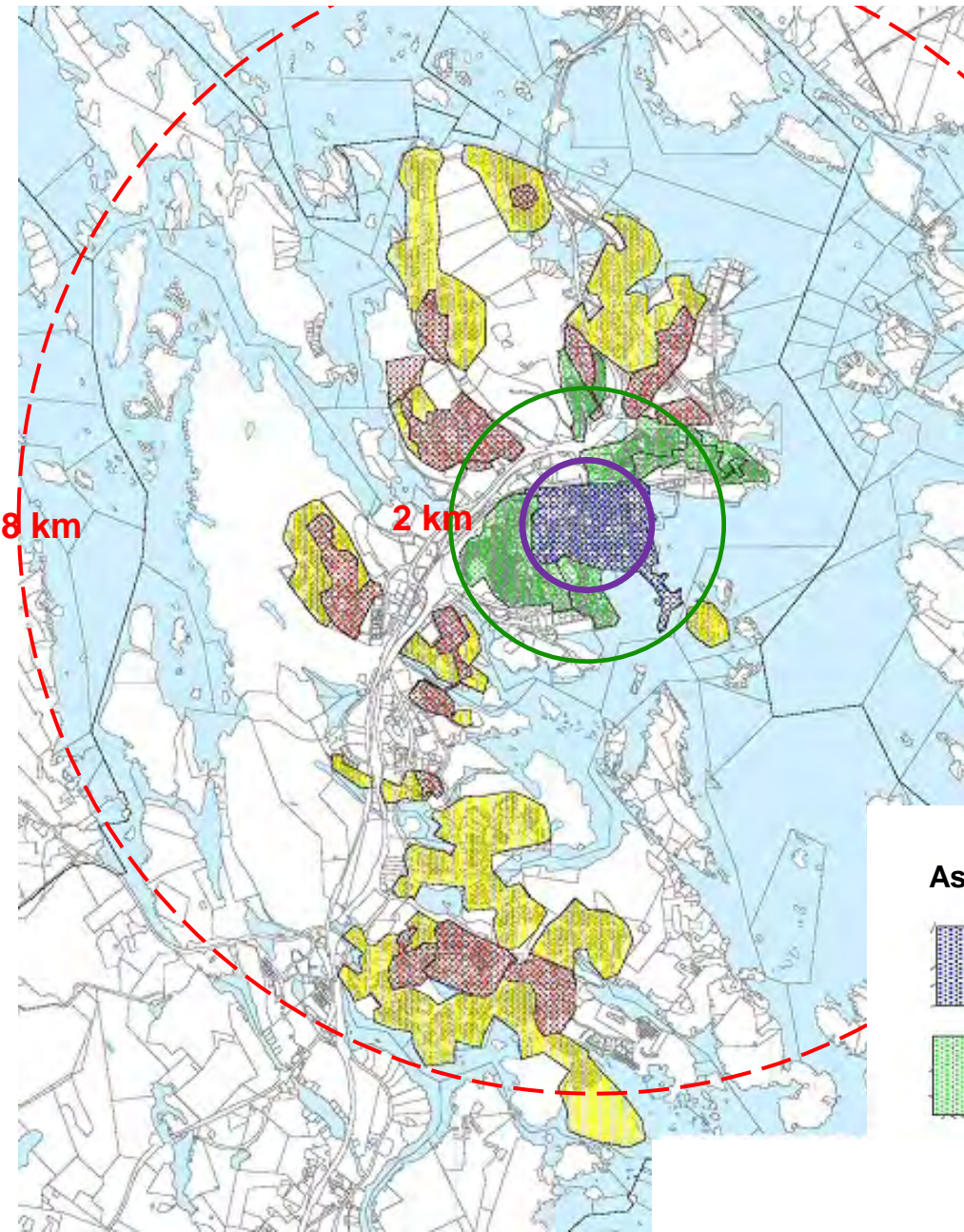
Tunnin matka-aika
Marchetti Constant 1994



Tunnin
matka-aika

Source: C. Marchetti Anthropological Invariants in Travel Behaviour
Technological Forecasting and Social Change 47, 75-88 (1994)

Kuopion malli



Uusi analyysimalli

Kaupunkijärjestelmät on tunnistettu ja niitä on tutkittu vuodesta 1993 lähtien

Asuntoalueet 2001 kaupunkijärjestelmittain



Jalankulku-
kaupunki



Joukkoliikenne-
kaupunki



Ulompi jalan-
kulkukaupunki



Autokaupunki

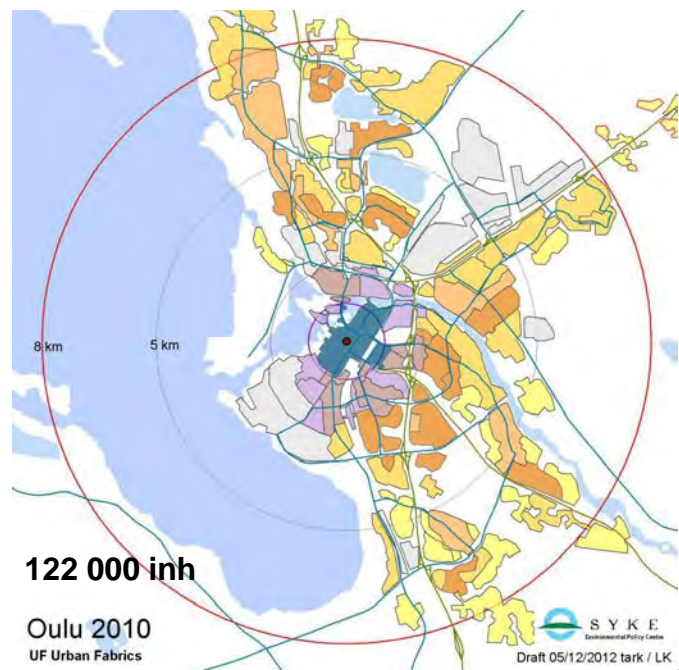
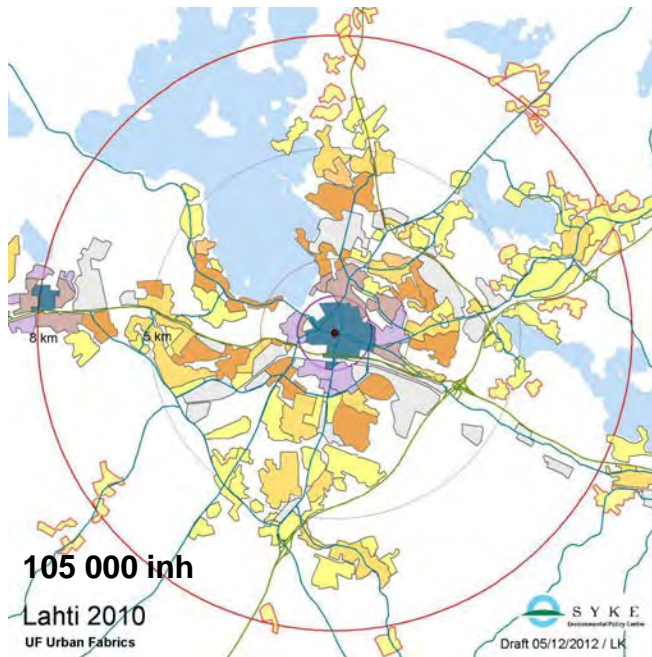
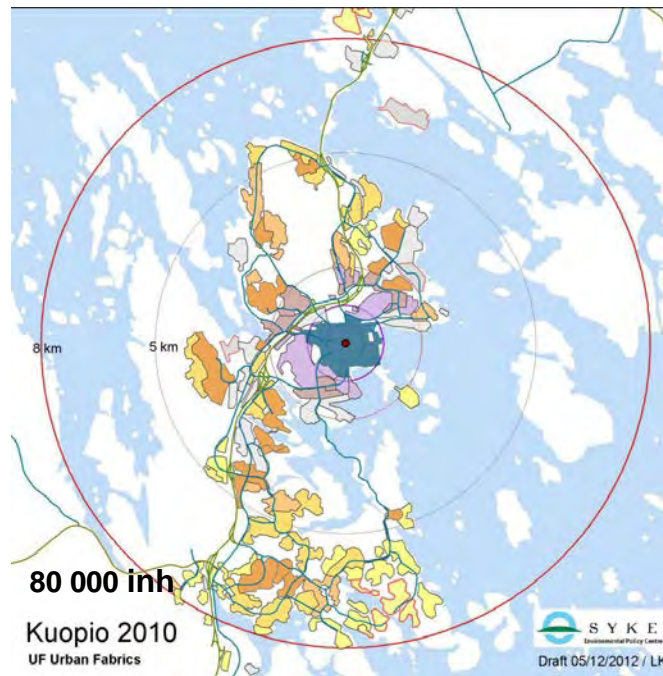
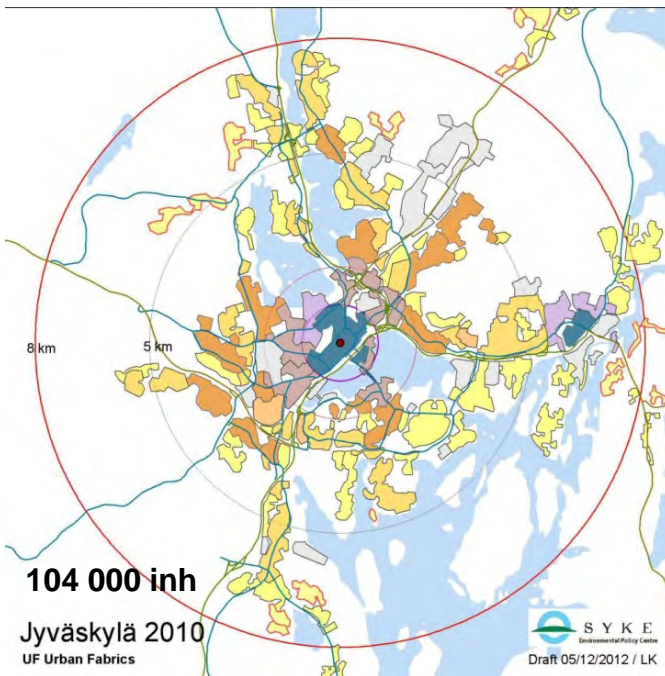
UF projekti

Kohdekaupungit 2010

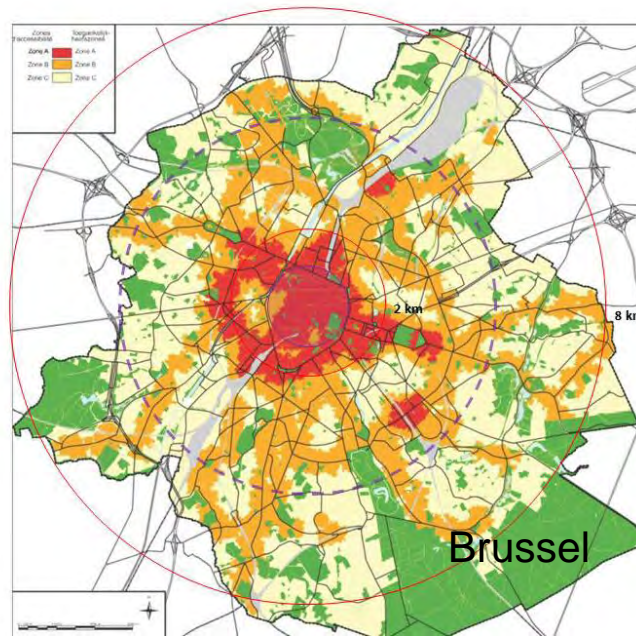
*Auto-,
joukkoliikenne-
ja jalankulku-
kaupunkeja*

Alueet 2010

- W (Walking City)
- WE
- WEB
- B (Bus City)
- BC
- CB
- C (Car City)

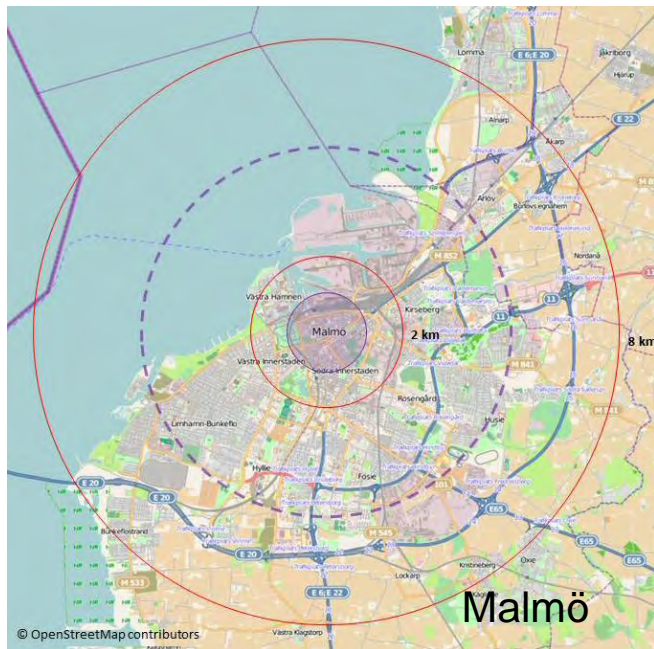


Kaupunkeja



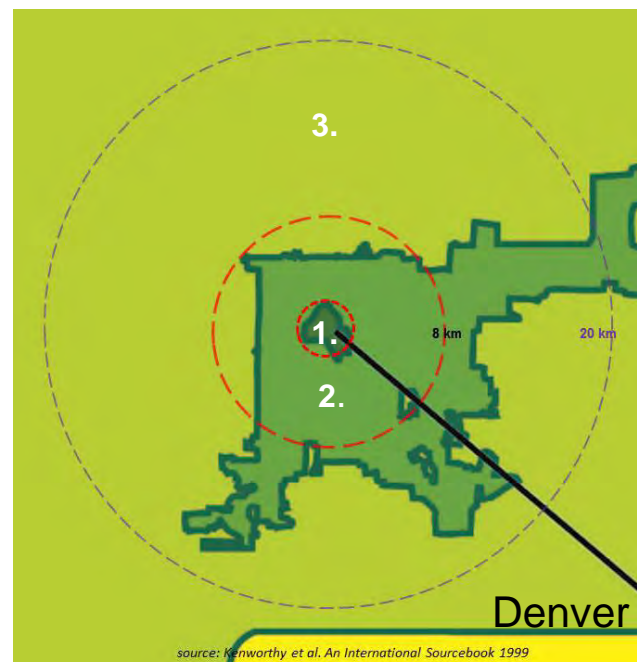
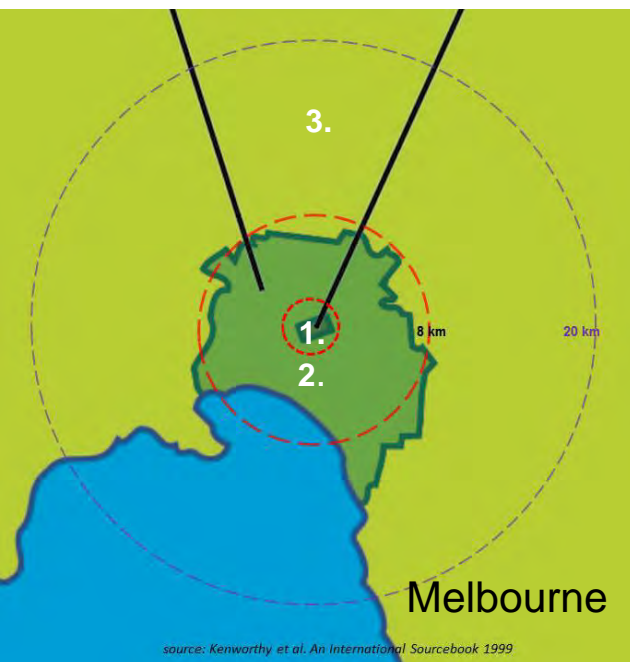
Kaupunkijärjestelmät

1. Jalankulkukaupunki (2 km)
2. Sisempi joukkoliikenne-
kaupunki (8 km)
ja autokaupunki
3. Autokaupunki ja
Ulompi joukkoliikenne-
kaupunki (20 km)



source:

Global Cities 1990



Kaupunkijärjestelmät

1. Jalankulkukaupunki (2 km)
2. Sisempi joukkoliikenne-
kaupunki (8 km)
ja autokaupunki
3. Autokaupunki ja
Ulompi joukkoliikenne-
kaupunki

Tunnin
matka-aika

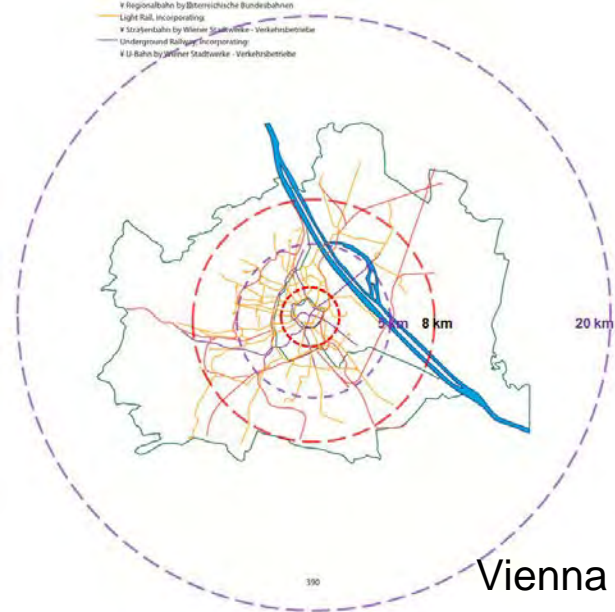
Sourcebook 1999:

1. Central Business District
2. Inner City (ennen 1945)
3. Metropolitan Area

Global Cities 1990

UF etäisyysasteikko kaupunkialueella:

- 2 km Jalankulkukaupunki
- 8 km Sisempi joukko-liikennekaupunki
- 20 km Ulompi joukko-liikennekaupunki
- Autokaupunki



Sourcebook 1999:

Malli

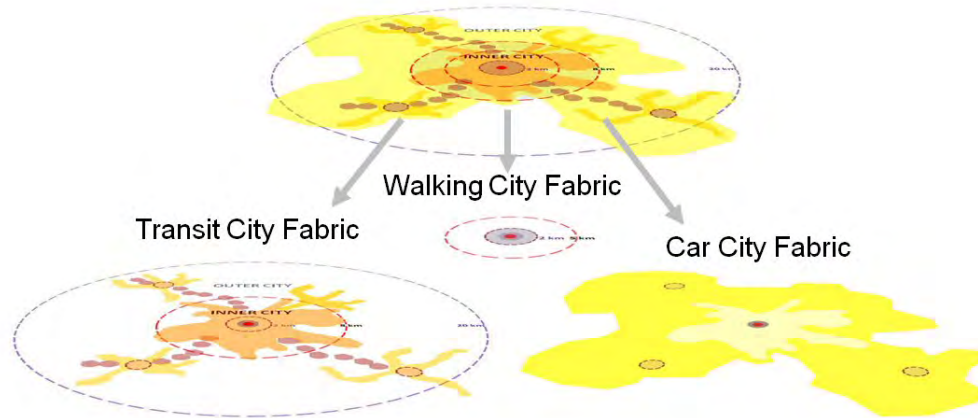
Kolme kaupunkijärjestelmää

Alueet

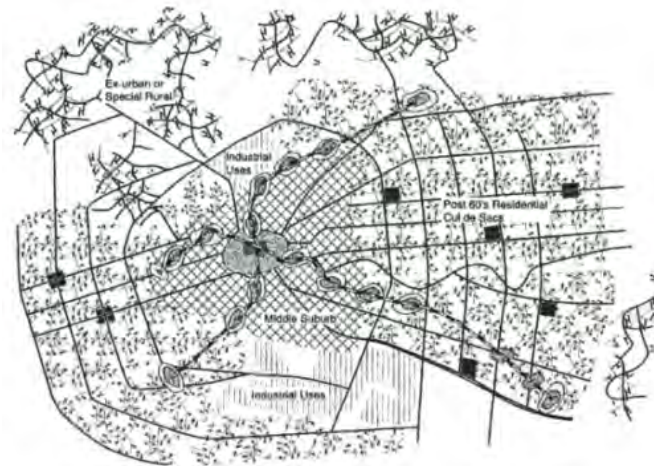
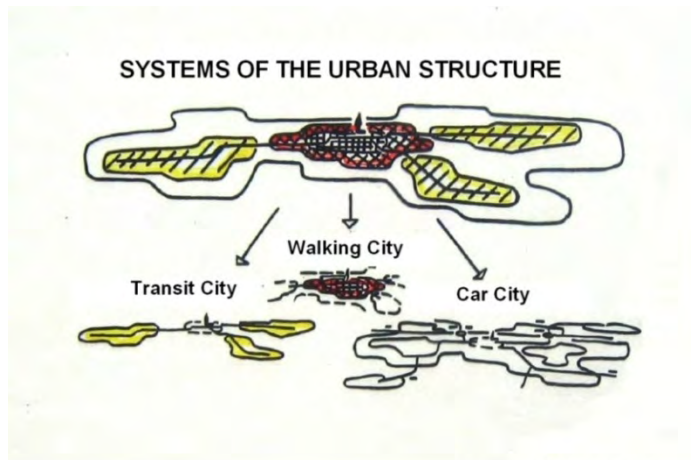
Elementit

Ominaisuudet

Three urban fabrics



Alueet



Yleismalli

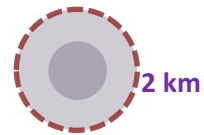
JALANKULKUKAUPUNKI

Sisempi jalankulku- kaupungin alue

- Monipuolisen ja vilkkaan jalankulkukaupungin alue, paljon kävelijöitä.

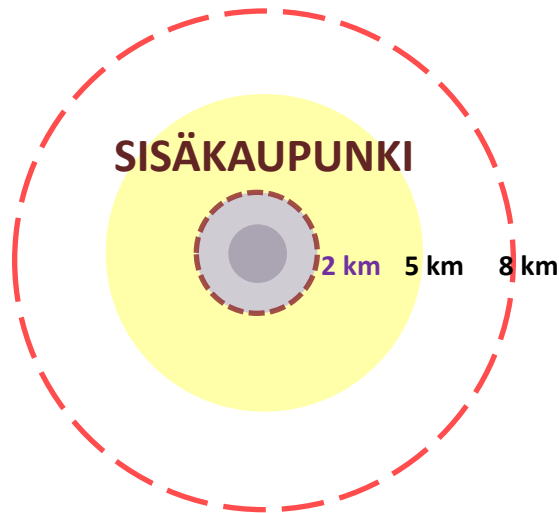
Ulompi jalankulku- kaupungin alue

- Alue painottuu asumiseen sekä erillisiin palvelu- ja työpaikka yksikköihin ja -alueisiin.



Yleismalli

JALANKULKUKAUPUNKI



Sisempi jalankulku- kaupungin alue

- Monipuolisen ja vilkkaan jalankulkukaupungin alue, paljon kävelijöitä.

Ulompi jalankulku- kaupungin alue

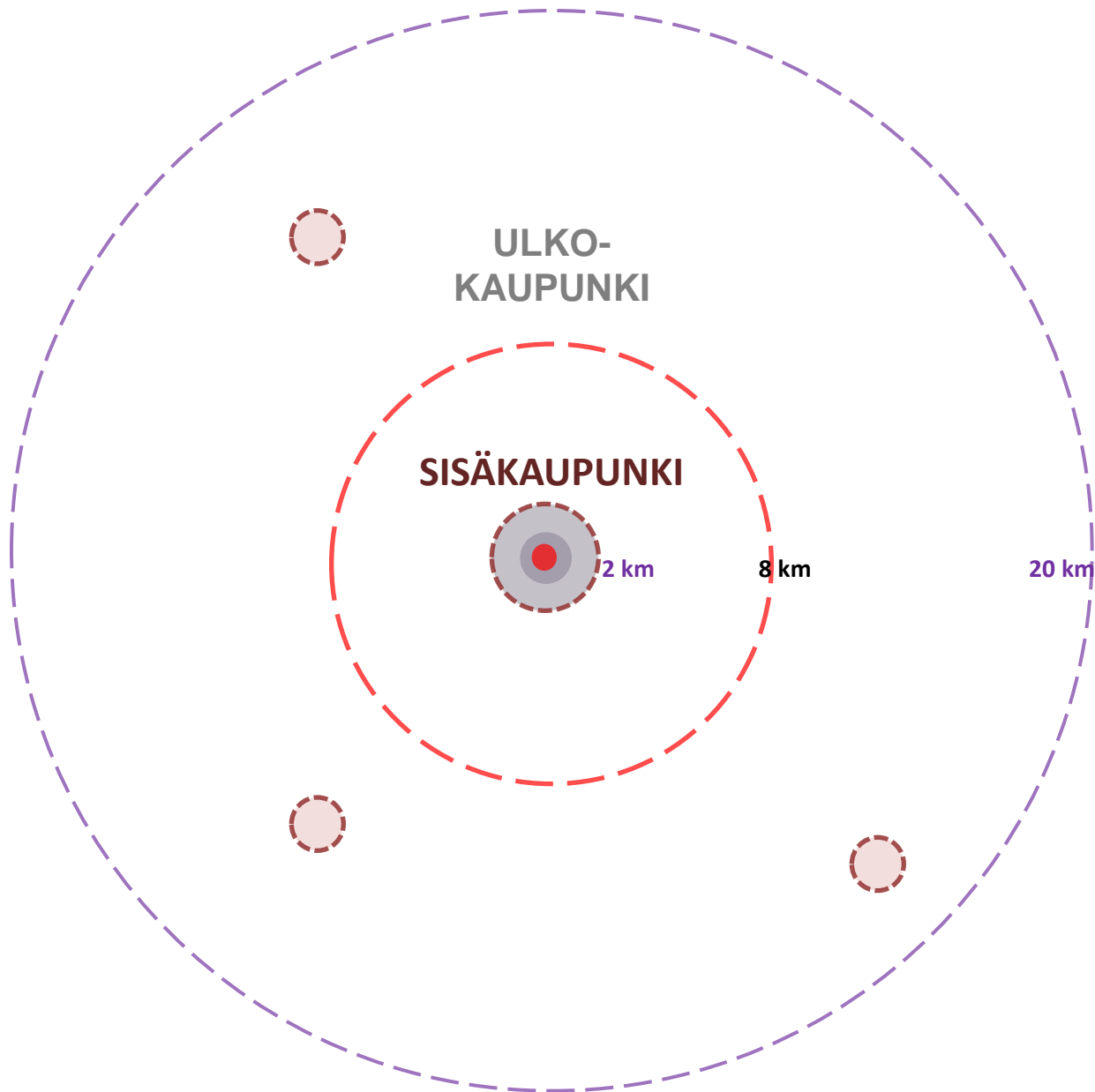
- Alue painottuu asumiseen sekä erillisiin palvelu- ja työpaikka yksikköihin ja -alueisiin.

Jalankulkukaupungin laajennusalue tai pyöräilyvyöhyke

- Mahdollinen joukkoliikenne- ja jalankulkukaupungin yhdistelmän alue tai pyöräilyvyöhyke

Yleismalli

JALANKULKUKAUPUNKI



Sisempi jalankulku- kaupungin alue

● Monipuolisen ja vilkkaan jalankulkukaupungin alue, paljon kävelijöitä.

Ulompi jalankulku- kaupungin alue

● Alue painottuu asumiseen sekä erillisiin palvelu- ja työpaikka yksikköihin ja -alueisiin.

Paikallinen jalankulku- kaupungin alue


● Alakeskusten pienet jalankulkukaupungin alueet

● CBD on kolmen kaupunkijärjestelmän yhdistelmä


Yleismalli

JOUKKOLIIKENNEKAUPUNKI

Sisempi joukkoliikenne- kaupungin alue

 Alue liittyy keskusta
raitiovaunuilla, bussi-
liikenteen peruslinjoilla sekä
muilla sisäkaupungin linjoilla



 CBD on kolmen
kaupunkijärjestelmän
yhdistelmä

Yleismalli

JOUKKOLIIKENNEKAUPUNKI



Sisempi joukkoliikennekaupungin alue

Alue liittyy keskusta
raitiovaunuilla, bus-
siikenteen peruslinjoilla sekä
muilla sisäkaupungin linjoilla

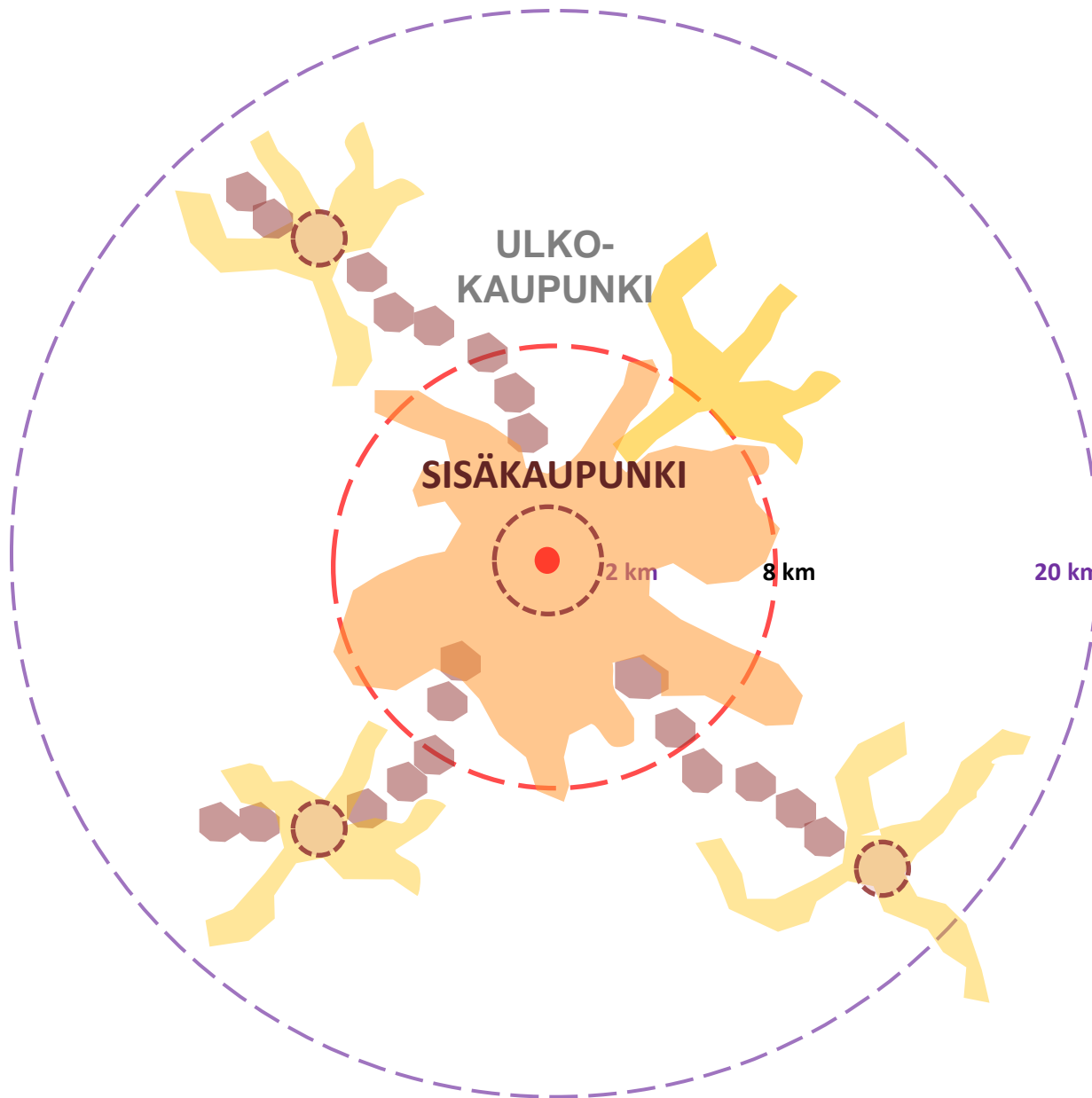
Ulomman joukkoliikennekaupungin alueet

Alueet liittyvät keskusta
bussiväylällä tai pikalinjoilla.


● CBD on kolmen
kaupunkijärjestelmän
yhdistelmä

Yleismalli


JOUKKOLIIKENNEKAUPUNKI





Sisempi joukkoliikenne- kaupungin alue


 Alue liittyy keskusta
raitiovaunuilla, bus-
siikenteen peruslinjoilla sekä
muilla sisäkaupungin linjoilla

Ulomman joukkoliikenne- kaupungin alueet

 Alueet liittyvät keskusta
bussiväylällä tai pikalinjoilla.

 Raideliikenteen aseisiin
tukeutuvat kaupunginosat

 Vahvat alakeskukset ja
Reunakaupungit sekä
syöttöliikenteeseen
tukeutuvaa ulompaa
joukkoliikennekaupunkia

 CBD on kolmen
kaupunkijärjestelmän
yhdistelmä

Yleismalli AUTOKAUPUNKI

Erilliset autokaupungin alueet

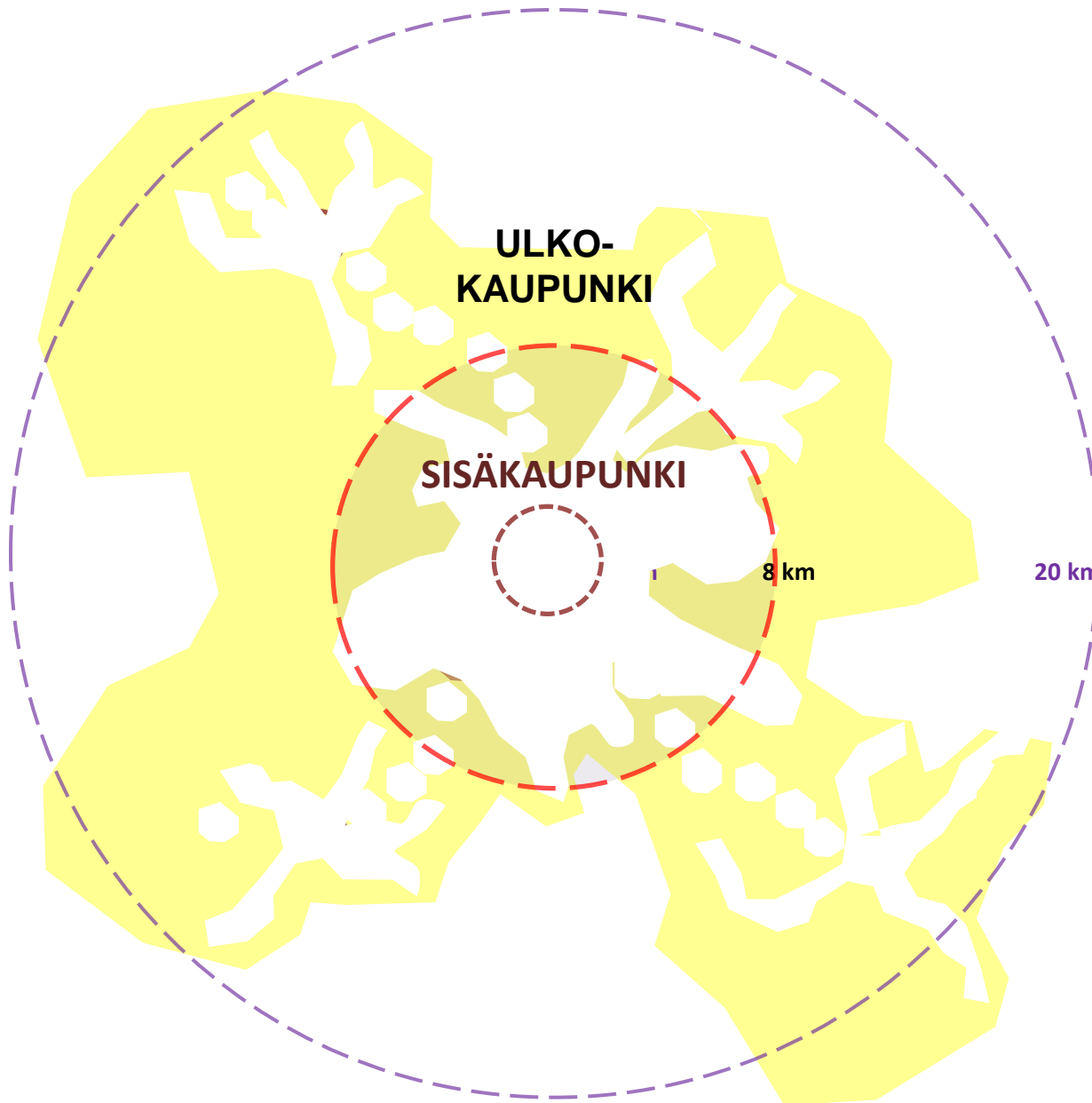
Alueet, joilla on vain autokaupunkia

Sisempi autokaupungin alue

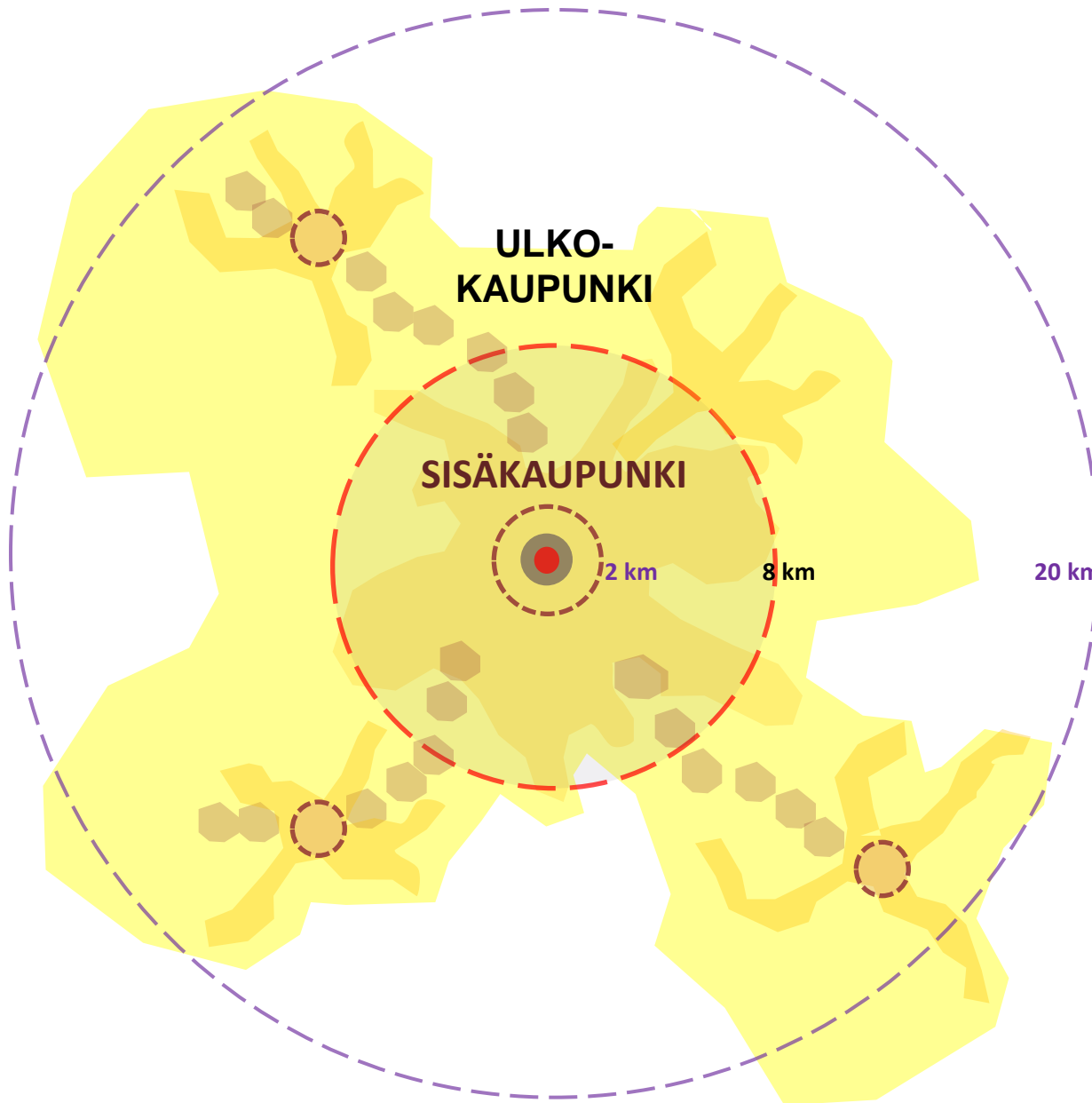
Autokaupungin alueet
Sisäkaupungissa

Ulompi autokaupungin alue

Autokaupungin alueet
Ulkokaupungissa



Yleismalli AUTOKAUPUNKI



Autokaupunki peittää koko kaupunkialueen

Autokaupungin elementit kattavat koko kaupunkialueen, myös jalankulku- ja joukkoliikennekaupungin alueet, ja on myös autoistuneita seka-alueita.

Sisempi autokaupunki

Autokaupungin elementit ja alueet Sisäkaupungissa

Ulompi autokaupunki

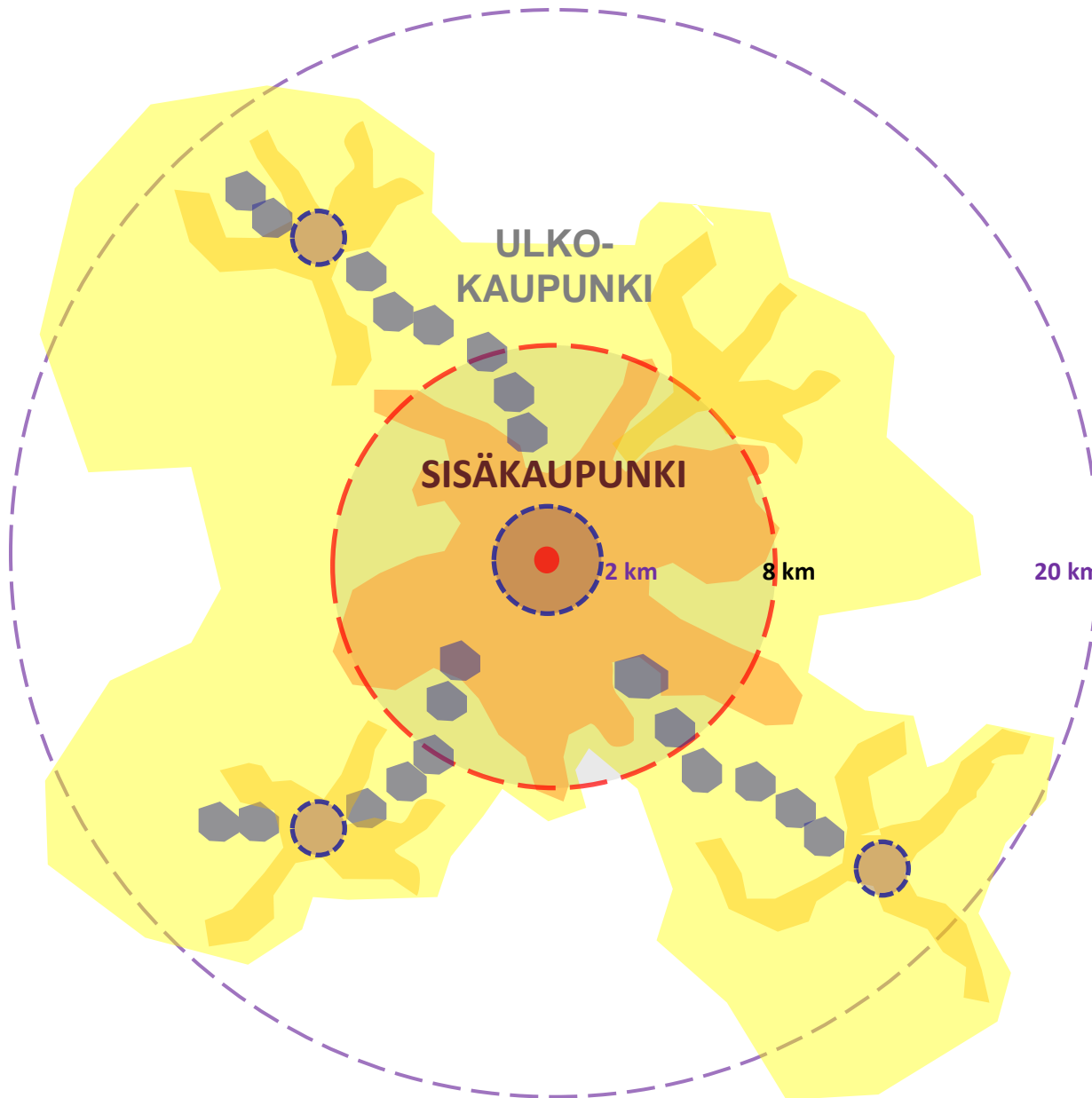
Autokaupungin elementit ja alueet Ulkokaupungissa





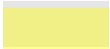



Reunakaupungit ovat kolmen kaupunkijärjestelmän yhdistelmiä

CBD on kolmen kaupunkijärjestelmän yhdistelmä

Yleismalli

PERUSKUVA



-  *Jalankulkukaupunki*
-  *Joukkoliikennekaupunki*
-  *Ulompi joukkoliikennekaupunki (bussit)*
-  *Ulompi joukkoliikennekaupunki (raideliikenne)*
-  *Sisempi autokaupunki*
-  *Ulompi autokaupunki*
-  Reunakaupungit ovat Joukkoliikennekaupungin, autokaupungin tai seudun yksiköitä
-  CBD on kolmen kaupunkijärjestelmän yhdistelmä

PERIURBAANIT ALUEET JA MAASEUTU, MUUT KAUPUNGIT
(KAUPUNKISEUTU TAI METROPOLIALUE)

Scales of the Models

The City

A Group of Cities
Ebeneser Howard 1898



20 km

UF / Urban Fabrics Scales:

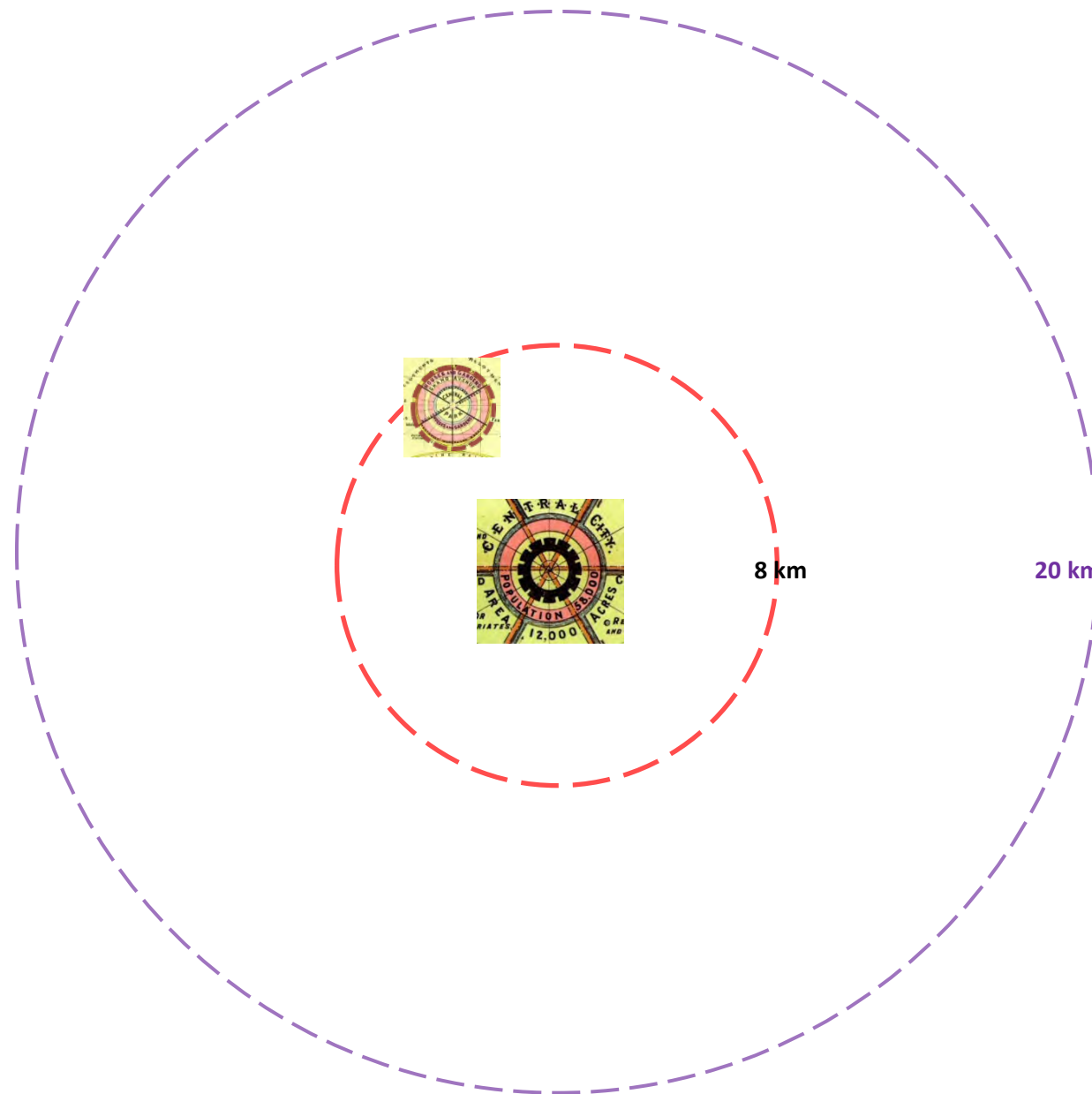
- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City

Scales of the Models

The City

Walking Cities

Ebeneser Howard 1898



UF / Urban Fabrics

Scales:

- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City

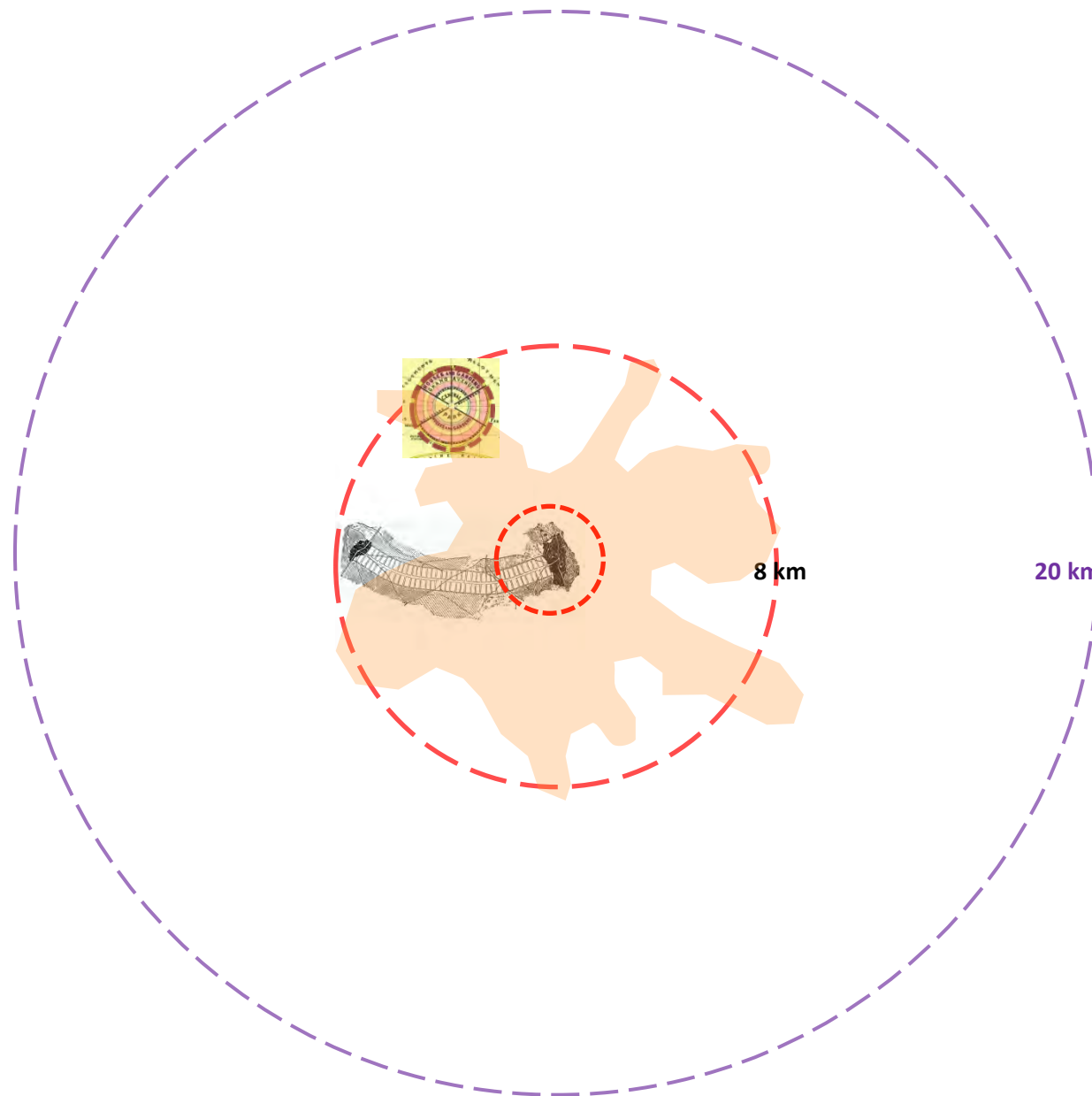
Scales of the Models

The City

Walking Cities

Ebeneser Howard 1898

Linear (Transit) City 1880



UF / Urban Fabrics

Scales:

- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City

Scales of the Models

The City

Walking Cities

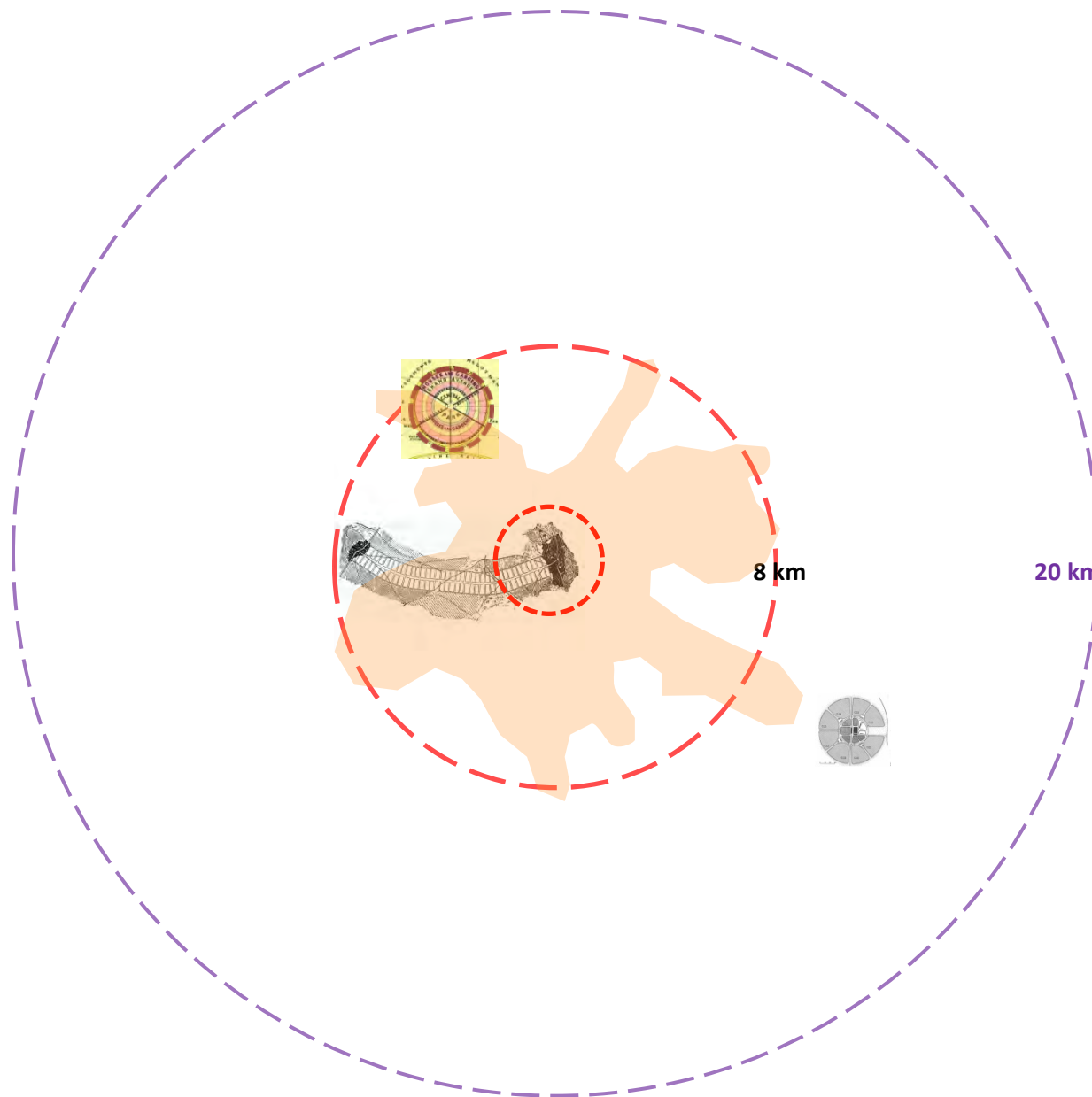
Ebeneser Howard 1898

Linear (Transit) City 1880

Outer Transit City

Neighbourhood

Stockholm 1945



UF / Urban Fabrics

Scales:

- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City

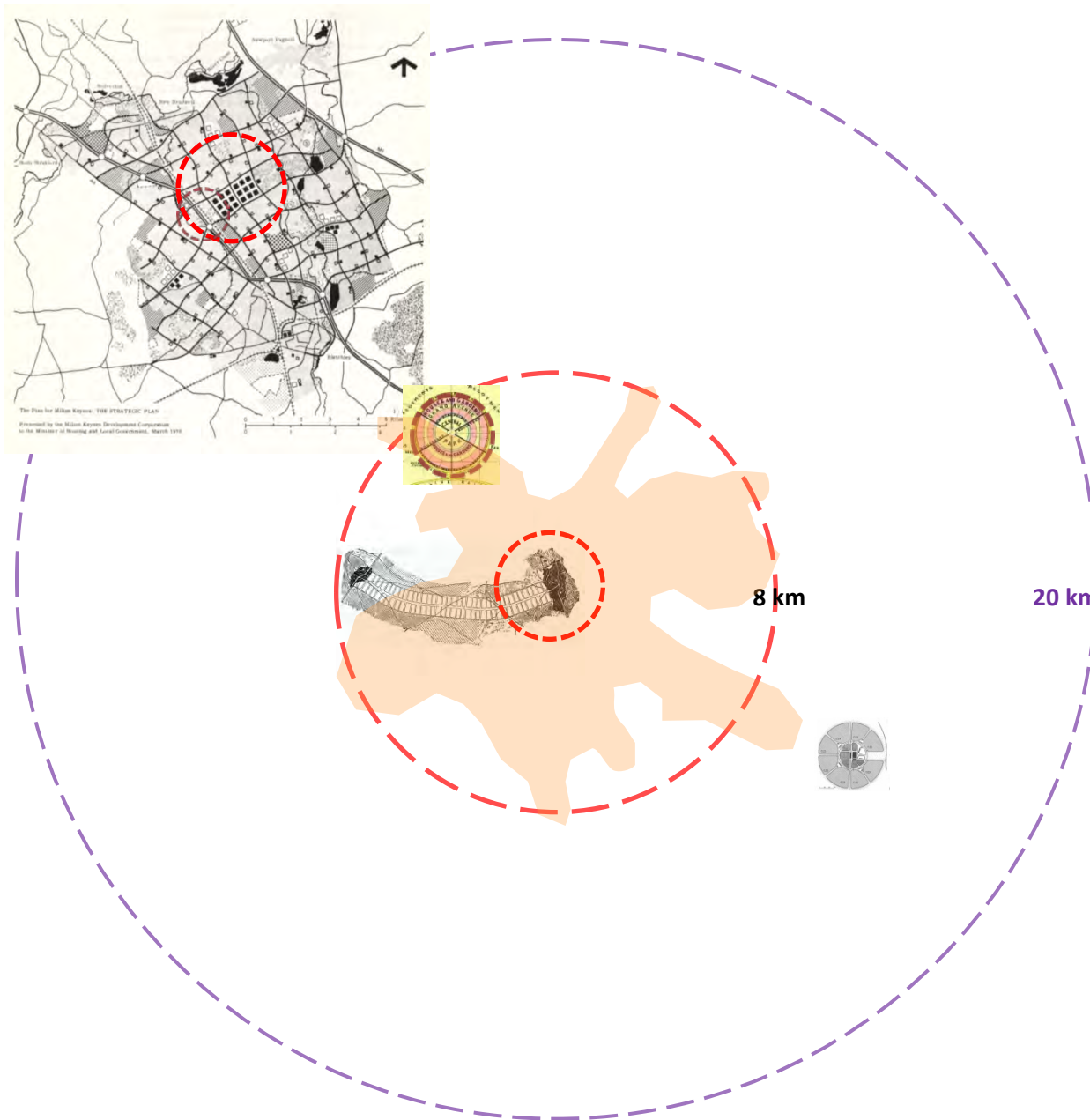
Scales of the Models

The City

Walking Cities
Ebeneser Howard 1898
Linear (Transit) City 1880
Outer Transit City
Neighbourhood
Stockholm 1945
Car- and Transit City
Milton Keynes 1970

UF / Urban Fabrics Scales:

- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City



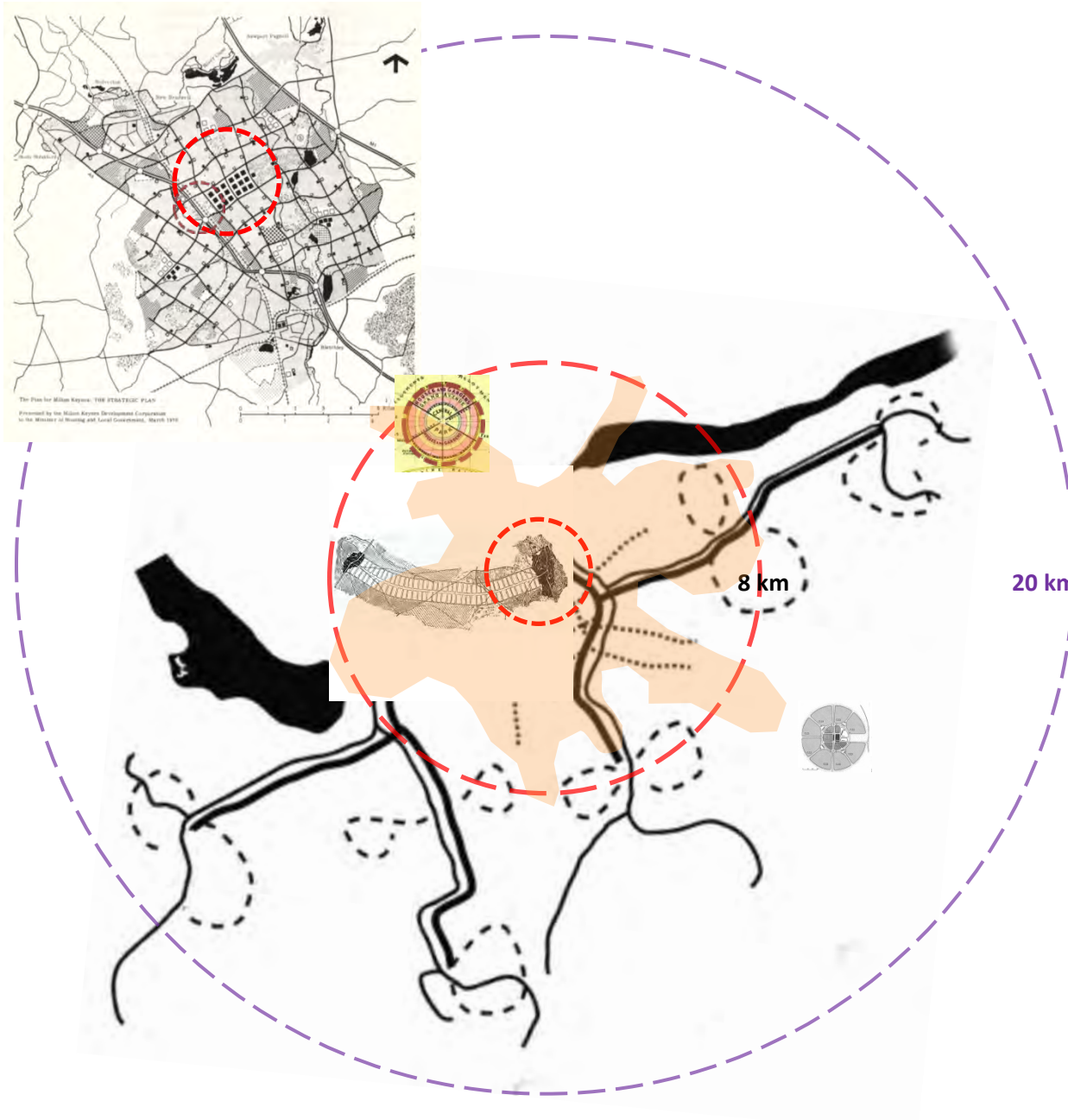
Scales of the Models

The City

- Walking Cities*
- Ebeneser Howard 1898*
- Linear (Transit) City 1880*
- Outer Transit City*
- Neighbourhood*
- Stockholm 1945*
- Car- and Transit City*
- Milton Keynes 1970*
- Inner and Outer Bus*
- Transit Ottawa 1978*

UF / Urban Fabrics Scales:

- 2 km Walking City
- 5 km (cycling distance)
- 8 km Inner Transit City and Inner Car City
- 20 km Outer Transit City and Outer Car City



Scales of the Models

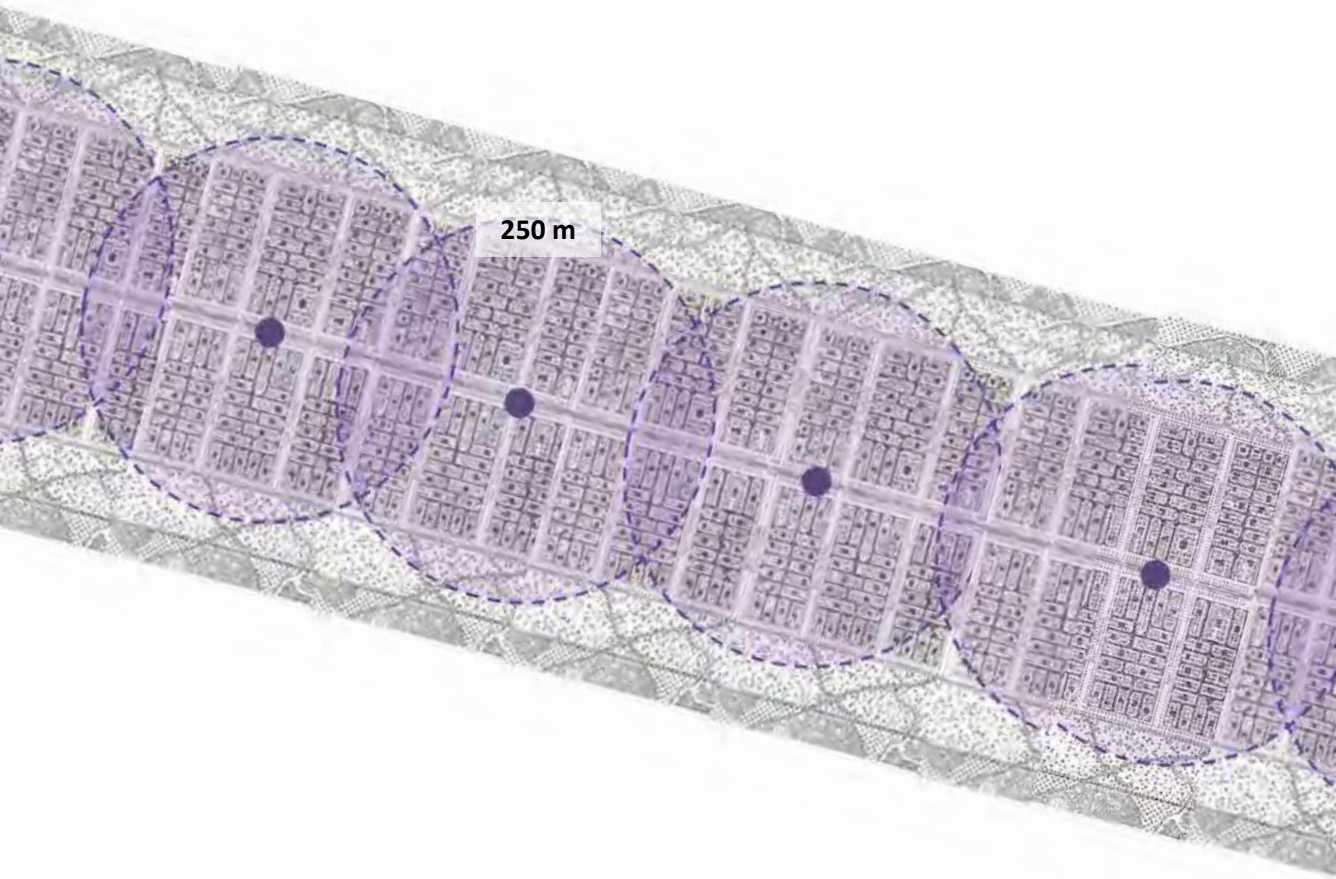
Neighbourhoods

Walking distance

1880

Linear City

Arturo Soria Y Mata



Tram

250 m good

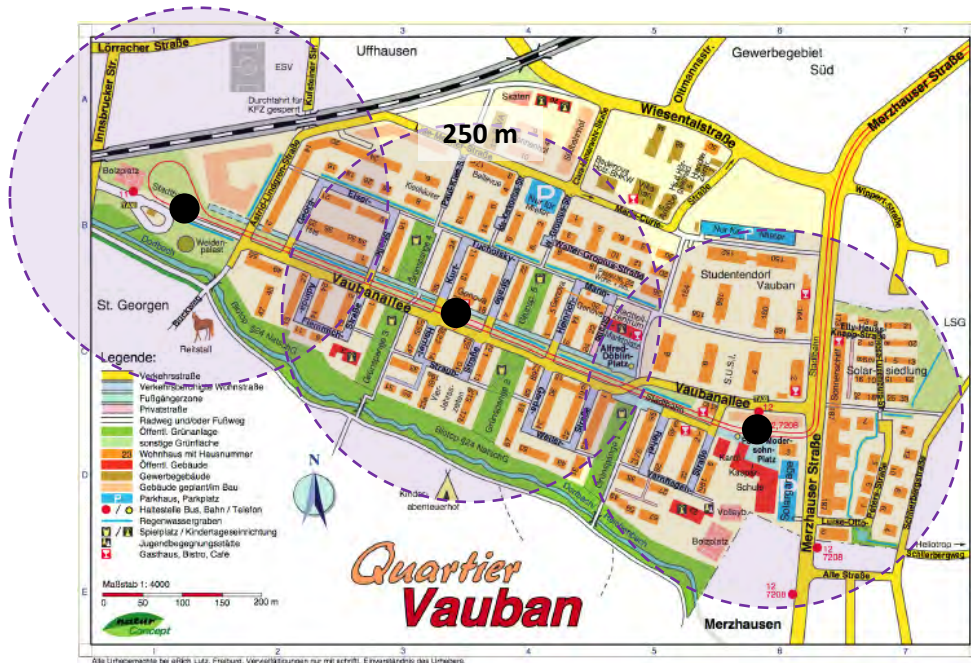


Tram stop

Scales of the Models

Neighbourhoods
Walking distance

*Vauban
Freiburg*



Tram

250 m good



Tram stop

Scales of the Models

Neighbourhoods
Walking distance

*Vauban
Freiburg*



Local Center

*400 m good
600 m fair*

Tram

250 m good



Tram stop

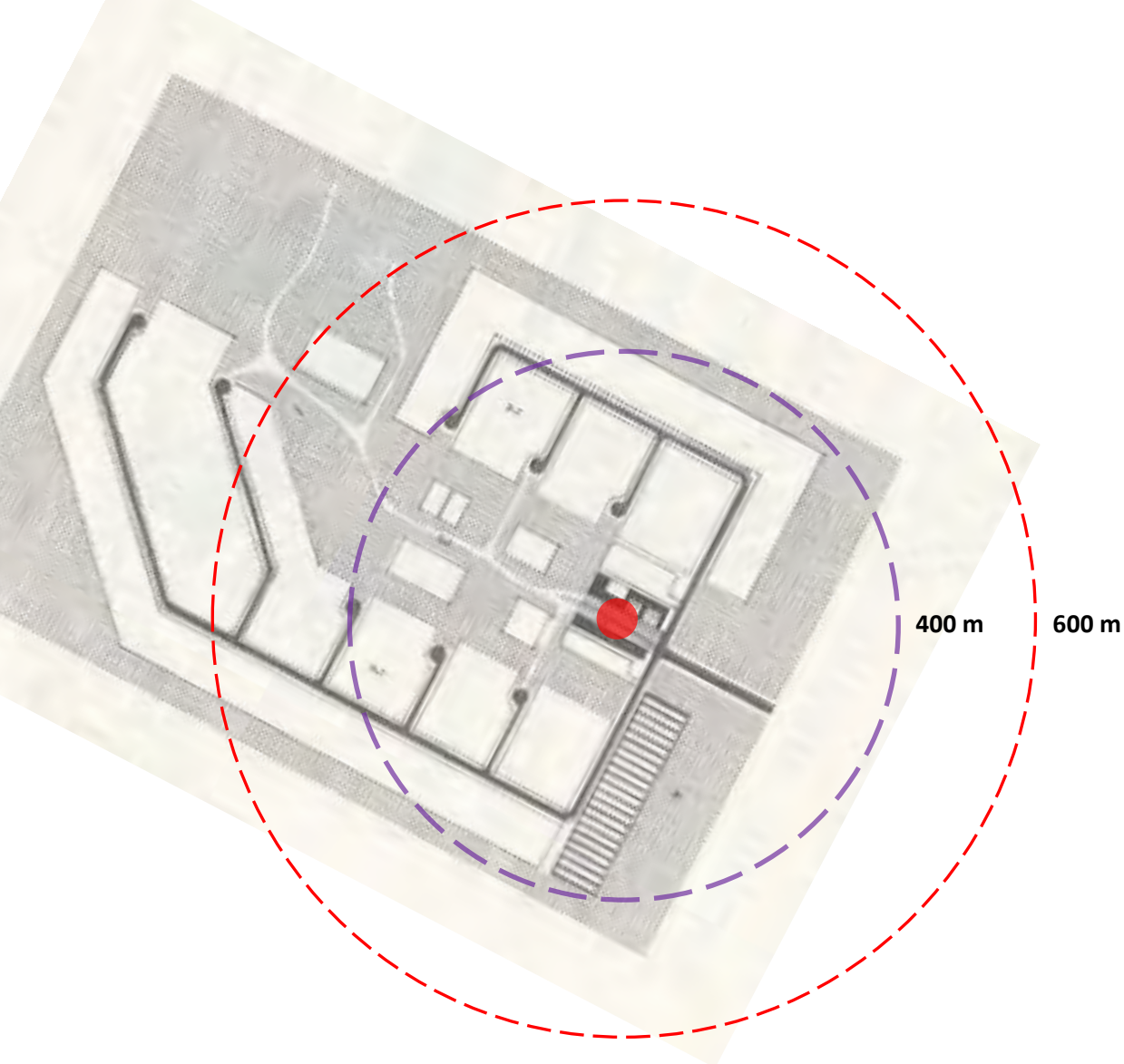
Models

Transit (and Car) City
(inner)

1957

Neighbourhood

Olli Kivinen



Local Center

400 m good

600 m fair

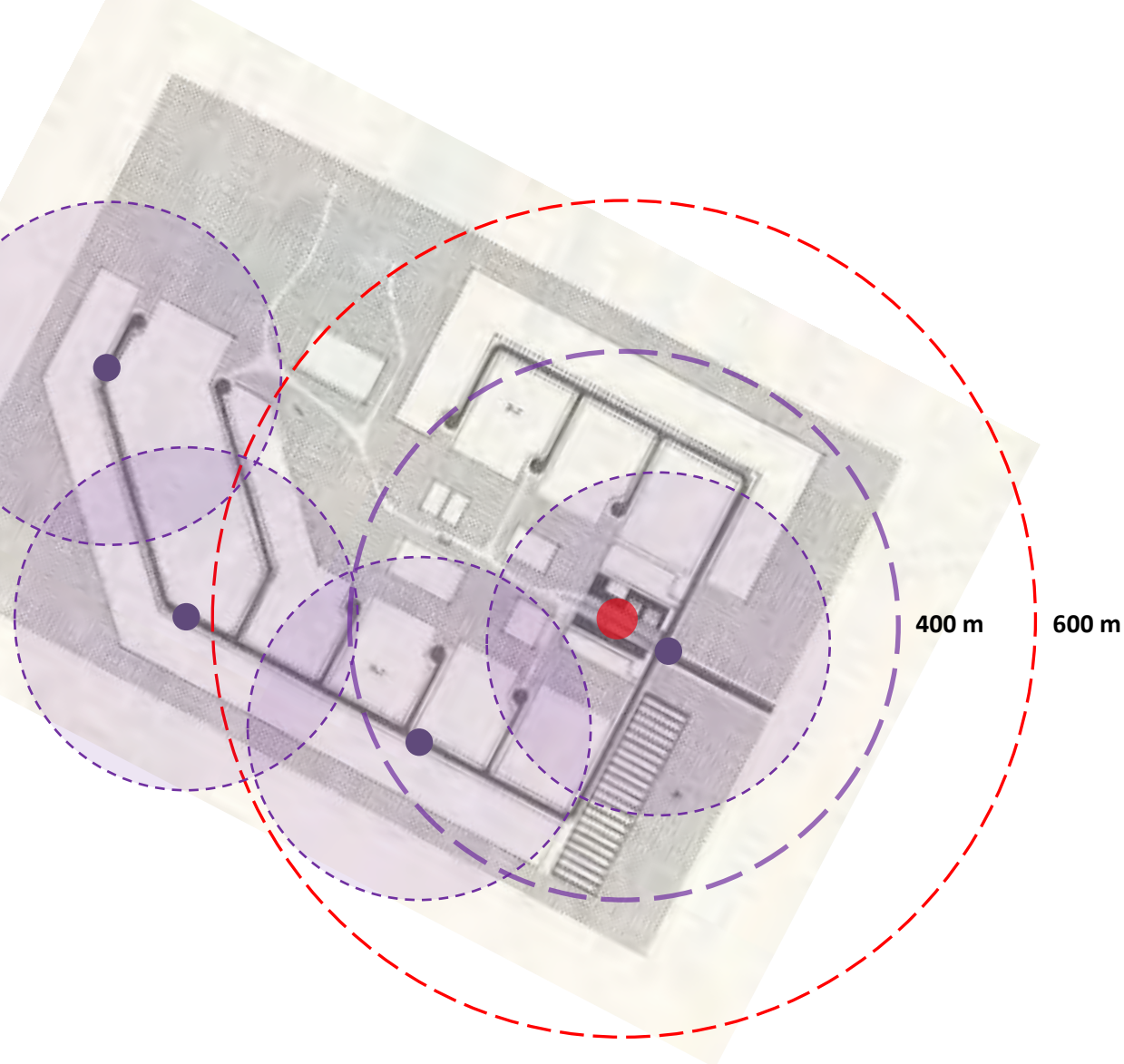
Models

Transit (and Car) City
(inner)

1957

Neighbourhood

Olli Kivinen



Local Center

400 m good

600 m fair

Bus

250 m good

300 m fair

400 m poor



Bus stop

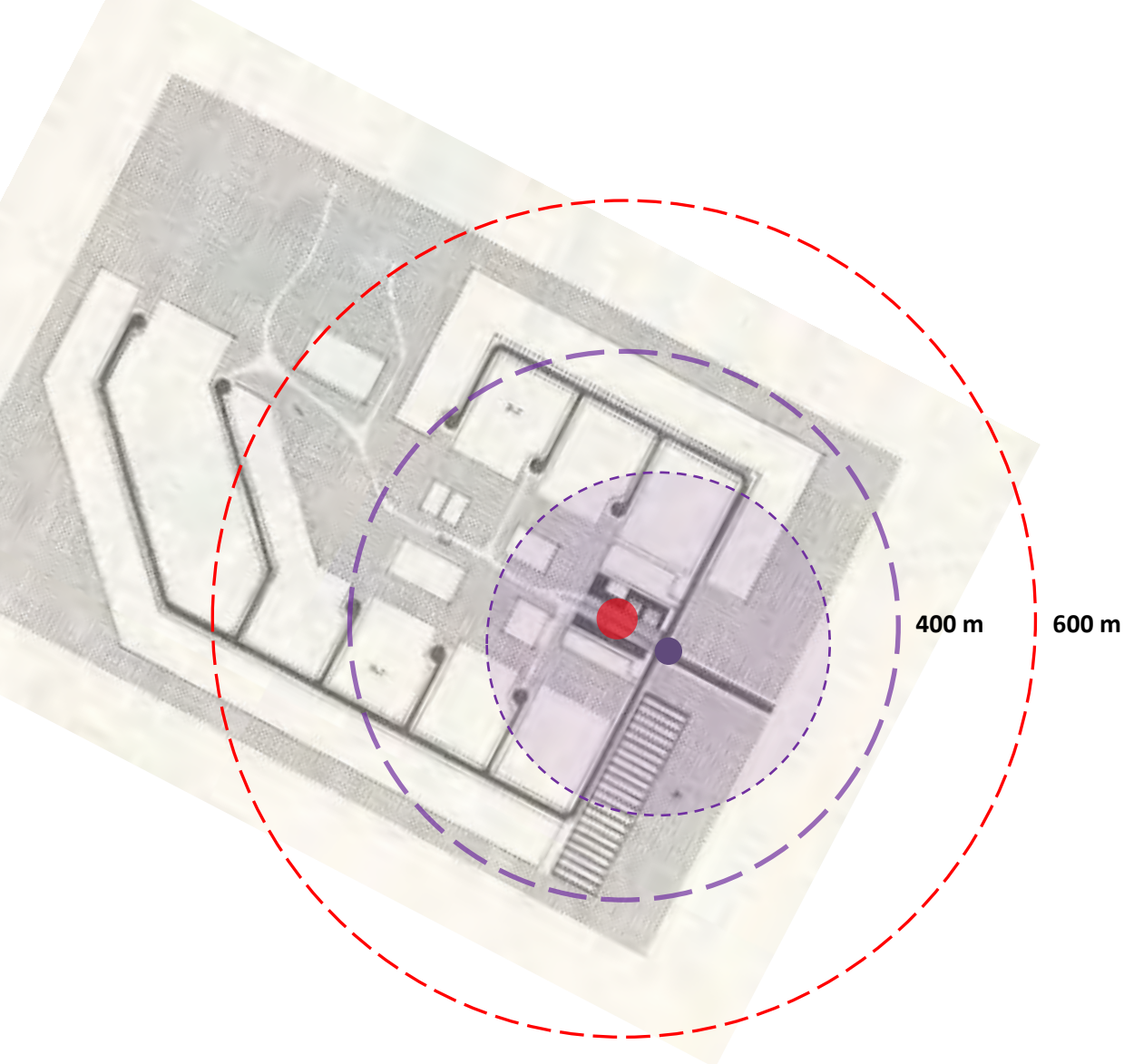
Models

Transit (and Car) City
(inner)

1957

Neighbourhood

Olli Kivinen



Local Center

400 m good

600 m fair

Bus

250 m good

300 m fair

400 m poor



Bus stop

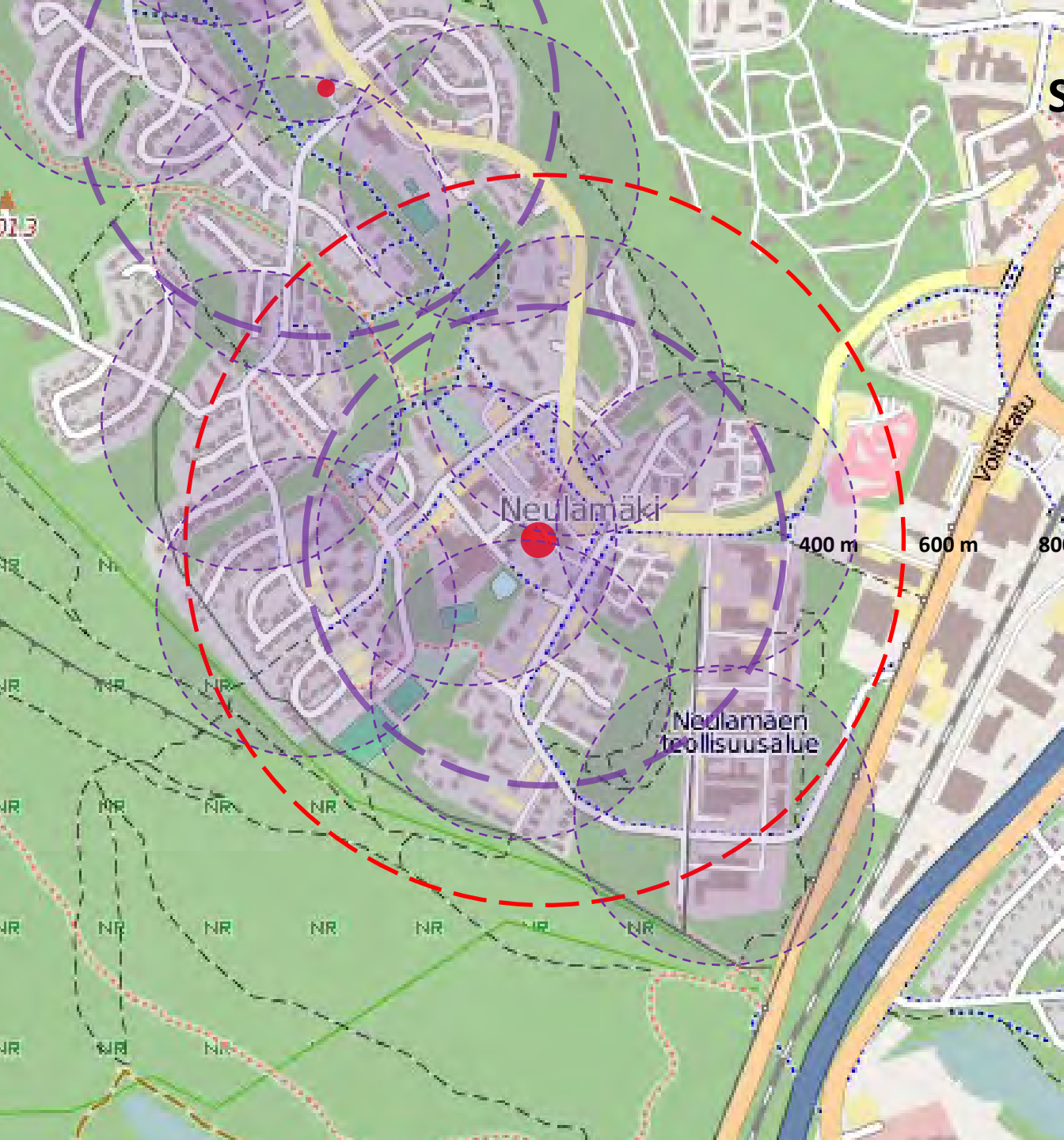
Scales of the Models

Neighbourhoods
Walking distance

1975

Neulamäki

Kuopio



Local center

400 m good

600 m fair

Bus

250 m good

300 m fair

Scales of the Models

Neighbourhoods
Walking distance

1970

Milton Keynes



Bus

250 m good
300 m fair
400 m poor

Models

Neighbourhoods
Walking distance

1990

Almere



Bus

250 m good
300 m fair
400 m poor

Scales of the Models

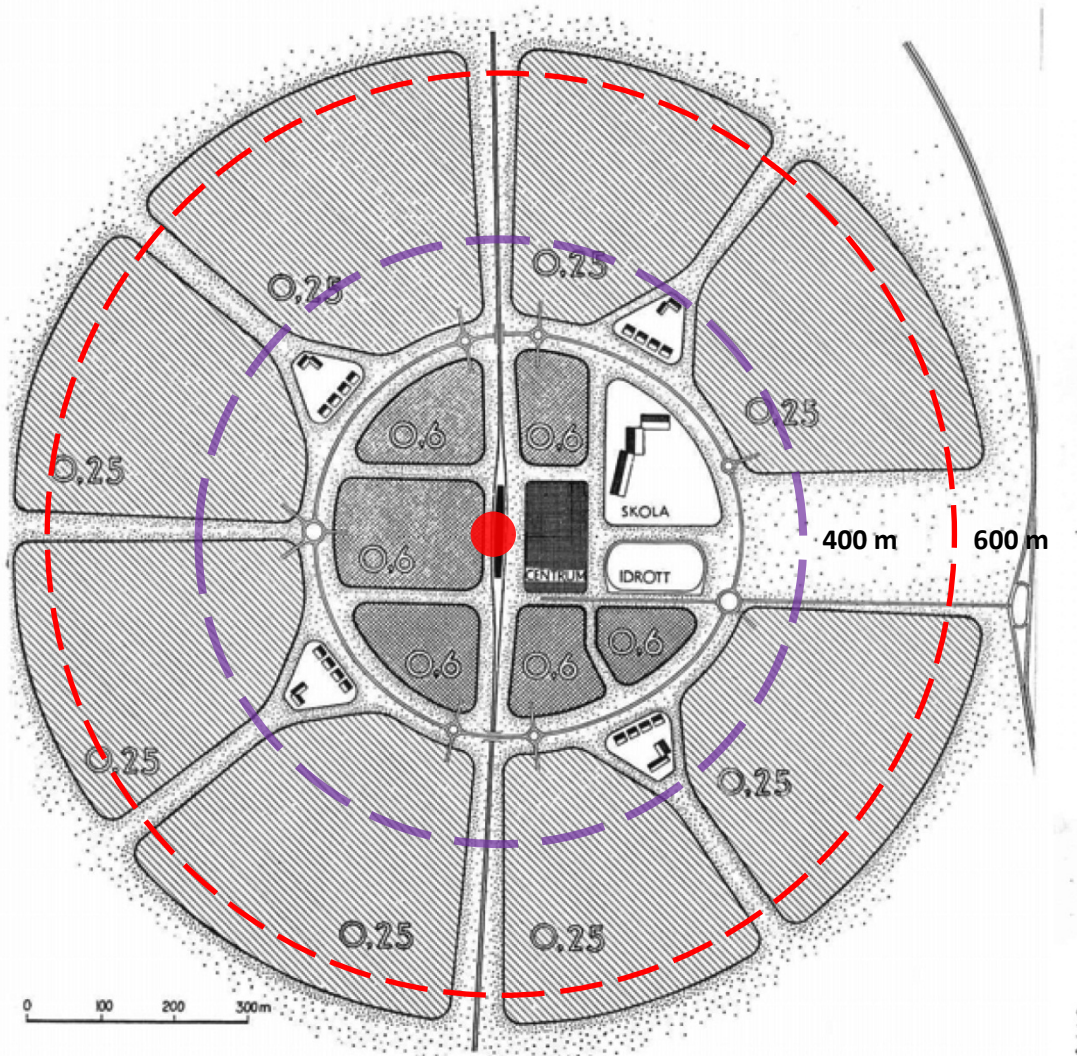
Neighbourhoods

Walking distance

1945

Neighbourhood

Framtida Stockholm



Railway station

400 m good

600 m fair

 Railway station

Myyrmäki Helsinki

UF Urban Fabrics scales:

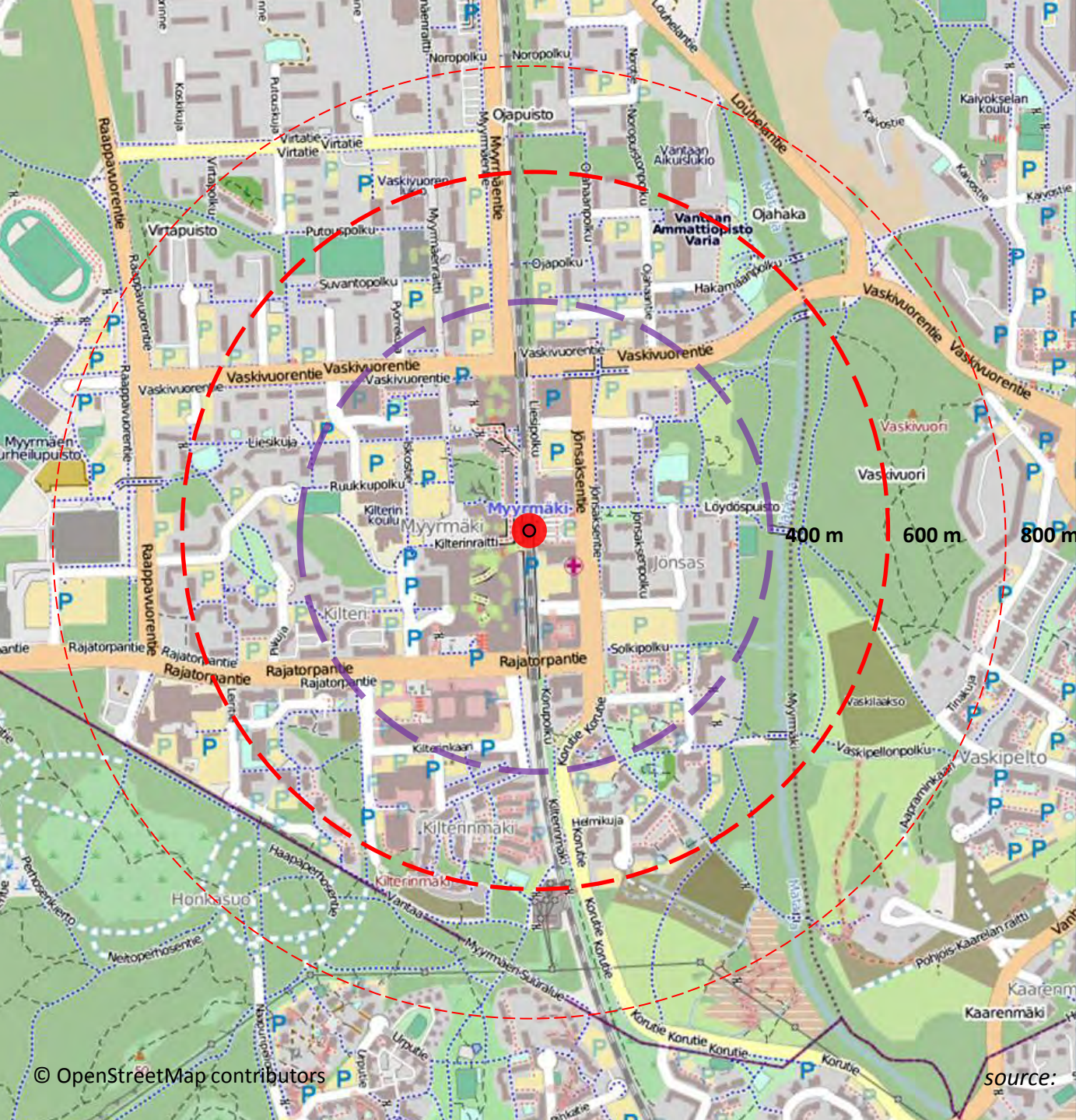
Transit City

Rail station

400 m good
600 m fair
800 m poor



Railway station



Milton Keynes

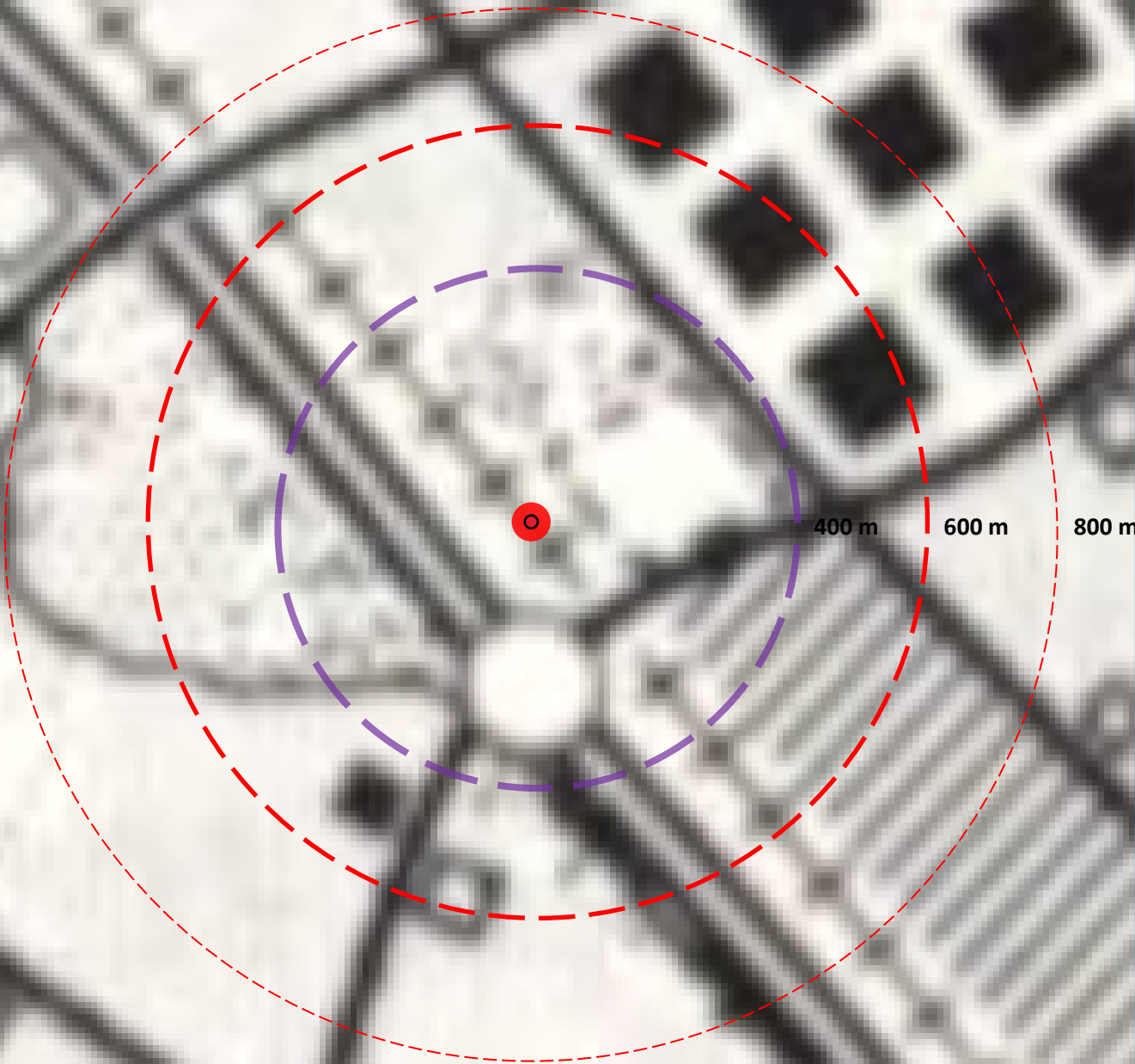
UF Urban Fabrics scales:

Transit City

Rail station

400 m good
600 m fair
800 m poor

 **Railway station**



Malli

Kolme kaupunkijärjestelmää

Alueet

Elementit

Ominaisuudet

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (biggest centres	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extensions)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extensions,	no	no	no
Good pedestrian environment	basic	basic	basic (local centres	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and W?)	basic T and C)	basic (T,C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations /Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Central Hospital	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Other institutes	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (c-type)	special (location)
Recreational area	no	exceptional	basic or special	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no rail)	no	basic (in big cities)
Local feeder bus	no	no	no	basic, big edge cities)	no	basic (in big cities)
Local car city bus	no	no	no	symbiosis ?	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element,	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	Special (C and T)	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	no	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	Special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C only)
Car dependent services	no	no	no	no	Special (location)	basic (C only)
Etc						

Peruselementtejä:



Jalankulkukaupunki

Alakeskusten
jalankulkukaupunki

Joukkoliikenne-
kaupunki

Autokaupunki

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (biggest centres	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extensions)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extensions,	no	no	no
Good pedestrian environment	basic	basic	basic (local centres	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and W?)	basic T and C)	basic (T,C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations /Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Central Hospital	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Other institutes	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (c-type)	special (location)
Recreational area	no	exceptional	basic or special	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special (best fabric)
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no rail)	no	basic (in big cities)
Local feeder bus	no	no	no	basic, big edge cities)	no	basic (in big cities)
Local car city bus	no	no	no	symbiosis ?	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element,	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	Special (C and T)	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	no	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	Special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C only)
Car dependent services	no	no	no	no	Special (location)	basic (C only)
Etc						

Peruselementtejä:



Jalankulkukaupunki

Alakeskusten
jalankulkukaupunki

Joukkoliikenne-
kaupunki

Autokaupunki

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (biggest centres	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extension)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extension)	no	no	no
Good pedestrian environment	basic	basic	basic (local centres)	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and W?)	basic T and C)	basic (T, C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations /Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Central Hospital	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Other institutes	special	basic (T,C and W)	basic T and C)	basic (T,C)	Special (C, T?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (c-type)	special (location)
Recreational area	no	exceptional	basic (special	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special (best fabric)
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no rail)	no	basic (in big cities)
Local feeder bus	no	no	no	basic, big edge cities)	no	basic (in big cities)
Local car city bus	no	no	no	symbiosis ?	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element,	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	Special (C and T)	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	no	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	Special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C Only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C Only)
Car dependent services	no	no	no	no	Special (location)	basic (C Only)
Etc						

Symbiosis



Peruselementtejä:

- Jalankulkukaupunki
- Alakeskusten jalankulkukaupunki
- Joukkoliikenne-kaupunki
- Autokaupunki

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (big cities)	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extension)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extension)	no	no	no
Good pedestrian environment	basic	basic	basic (local centres)	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and W?)	basic T and C)	basic (T, C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations /Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	special (T, C and W)	basic T and C)	basic (T, C)	Special (C, T?)	no
Central Hospital	special	special (no W)	basic T and C)	basic (T, C)	Special (C, T?)	no
Other institutes	special	basic (no W)	basic T and C)	basic (T, C)	Special (C, T?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (c-type)	special (location)
Recreational area	no	exceptional	basic (special	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special (best fabric)
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no rail)	no	basic (in big cities)
Local feeder bus	no	no	no	basic (big edge cities)	no	basic (in big cities)
Local car city bus	no	no	no	no	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	special (big service	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	special (big service	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C Only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C Only)
Car dependent services	no	no	no	no	Special (location)	basic (C Only)
Etc						

Symbiosis

Conflict

Conflict



Peruselementtejä:

- Jalankulkaupunki
- Alakeskusten jalankulkaupunki
- Joukkoliikenne-kaupunki
- Autokaupunki

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (biggest centres	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extension)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extension)	no	no	no
Good pedestrian environment	basic	basic	basic (local centres)	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and W?)	basic T and C)	basic (T, C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations/Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	special (T, C and W)	basic T and C)	basic (T, C)	special (C, W?)	no
Central Hospital	special	special (T and W)	basic T and C)	basic (T, C)	Special	no
Other institutes	special	basic (T and W)	basic T and C)	basic (T, C)	Special (C, W?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (C-type)	special (location)
Recreational area	no	exceptional	basic	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no rail)	no	basic (in big cities)
Local feeder bus	no	no	no	basic, big edge cities)	no	basic (in big cities)
Local car city bus	no	no	no	no	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	special (big service	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	special (big service	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C Only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C Only)
Car dependent services	no	no	no	no	Special (location)	basic (C Only)
Etc						

Symbiosis

Conflict

Symbiosis

Conflict



Peruselementtejä:

Jalankulkaupunki

Alakeskusten
jalankulkaupunki

Joukkoliikenne-
kaupunki

Autokaupunki

Elements

Walking City

Transit City

Car City

URBAN FABRICS

Kaupunki- järjestelmien elementit

Elements	Walking City Fabric		Transit City Fabric		Car City Fabric	
	Inner Walking City radius 1 km	Outer Walking City (1 to 2 km)	Inner Transit City 2 to 8 km	Outer Transit City more than 8 km	Inner Car City 2 to 8 km	Outer Car City more than 8 km
Market square, Market Hall	basic for W and T	exceptional	exceptional (best sub-	exceptional (best sub-	no	no
Pedestrian Centre	basic for W and T	special (big cities only)	special (best	special (best edge	no	exceptional (best edge
Pedestrian street	basic for W and T	special (best	Special (best	special (best edge	no	exceptional (best edge
Active street	basic for W and T	special	special	special (best edge	no	exceptional (best edge
Multi-storey warehouses	basic for W and T	exceptional (big cities)	no	special (biggest sub-	no	no
Transit Centre	basic for W and T	alternative location	no	special (node)	no	no
Small shops and service facilities by the	basic	special (big cities, old	special (big sub-	special (big sub-	no	no
Urban Park, high quality	basic	special (location)	special	special	special	special
Prized parking	basic	basic (not in small	special (biggest centres	special (biggest	special (biggest units)	special (biggest centres
City bus lines (Walking City)	basic	basic	special (extension)	no	no	no
City rail (Walking City), catchment 250 to 400 m	Special (biggest cities)	Special (biggest cities)	Special (extension)	no	no	no
Good pedestrian environment	basic	basic	basic (local centres	basic	no	exceptional (best edge
Neighbourhood with local services	basic	basic	basic	basic	special (good	special
Local service units (walking based)	basic	basic	basic	basic	special (good	no
High density housing, blocks of flats	basic	basic	basic	basic	special (location)	special
Office blocs	basic (T and W, C?)	basic T, C and	basic T and C)	basic (T, C)	basic	basic
Local Park	basic	basic	basic	basic	basic (catchment)	basic (catchment)
Trams, catchment 250 to 300 m (W,T)	basic (not in small cities)	basic (not in small	basic (not in small	exceptional	exceptional (good	no
Bus street, bus lanes	special (T, space)	basic (need)	basic (need)	basic (need)	Special (location)	no
Inner City buses, catchment 250 to 300 m	basic (T,W)	basic (T,W, coverage?)	basic	exceptional	special (good	no
Local service centre (walking based)	basic	special (old units)	basic	basic	no	no
Local Stations /Outer transit (train, metro, light	terminal (T and C)	no	special (big cities)	basic	no	no
University	special	special (T, C and W)	basic T and C)	basic (T, C)	Special (C, W?)	no
Central Hospital	special	special (T and W)	basic T and C)	basic (T, C)	Special	no
Other institutes	special	basic (T and W)	basic T and C)	basic (T, C)	Special (C, W?)	no
Sport and Recreational Centres	no	special	basic	special (location)	special (C-type)	special (location)
Recreational area	no	exceptional	basic	special (location)	special	special (location)
Medium density housing, rowhouses	special (old fabric, small	basic (old fabric, small	basic	basic	basic	special
Good cycling environment	Special (best centres)	basic (except old fabric)	basic	basic	basic	special (best fabric)
Expressbus	no	no	special	basic	no	basic (in big cities)
BRT, Busway	no	no	no	basic (if no road)	no	basic (in big cities)
Local feeder bus	no	no	no	basic, big edge cities	no	basic (in big cities)
Local car city bus	no	no	no	no	basic	basic
Low density housing	exceptional (old housing)	special (small cities,	special (limited	special (limited	basic	basic (limited amount)
Hypermarket	exceptional C-element	special C-element,	exceptional C-element,	special C-element,	basic	basic (limited amount)
Multi-storey parking units	Special C-unit, positive	special (big service	special (big service	special (big service	basic (big service	basic
Underground parking unit	Special C-unit, positive	no	no	special (big service	special (big service	special (big service
Large parking areas	Exceptional (Car Cities)	special (big service	special (big service	special (big service	basic (big service	basic
Freeway	exceptional (conflicting)	exceptional (conflicting)	exceptional (conflicting)	exceptional	basic (problematic)	basic
Highway	exceptional (conflicting)	special (problematic)	special (problematic)	exceptional	basic	basic
Shopping Mall	no	no	no	no	special (space)	basic
Car based shopping streets	no	no	no	no	basic (Car Cities)	no
Park and ride	no	no	no	no	no	no
Car dependent housing	no	no	no	no	Special (location)	basic (C Only)
Car dependent jobs	no	no	no	no	Special (location)	basic (C Only)
Car dependent services	no	no	no	no	Special (location)	basic (C Only)
Etc						

Symbiosis

Mixtures

Conflict

Symbiosis

Mixtures

Conflict



Peruselementtejä:

- Jalankulkaupunki
- Alakeskusten jalankulkaupunki
- Joukkoliikenne-kaupunki
- Autokaupunki

***Kaupunki-
järjestelmien
elementit***

Yleiset kaupunkielementit

Kaupunkijärjestelmien perus- ja erityiselementit

Yhteiset elementit

(kadut, palveluyksiköt, puistot jne)

Yhteen sovittavat elementit

*(ympäristön mukaiset rakennukset ja alueet,
sillat, kannet, tunnelit, maanalaiset tilat, jne)*

Rajoja viestivät elementit

*(Porttirakennukset, portit,
hahmon muutokset rakenteissa, jne)*

Malli

Kolme kaupunkijärjestelmää

Alueet

Elementit

Ominaisuudet

Malli

Kolme kaupunkijärjestelmää

Ominaisuudet

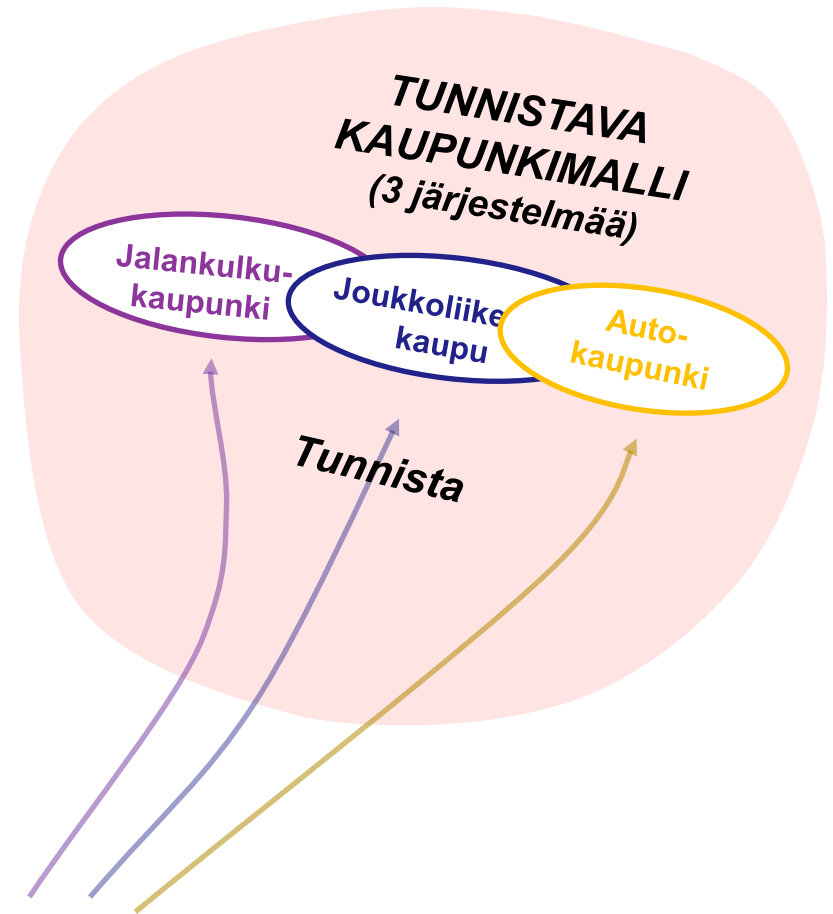
vahvuus - kasvu - taantuminen - heikkous
monipuolisuus - sekoittuneisuus - yksipuolisuus
autottomuus - autoistuneisuus - autoistumisaste
terveydellisyys - sairastuttavuus
energian säästö - energian tuhlaus
päästöjen vähäisyys – päästöjen runsaus
jne

Teoria

Kolme kaupunkijärjestelmää

tunnista – arvosta - kehitä

Kolmen kaupunkijärjestelmän malleilla kaupunkijärjestelmät tunnistetaan



Kaupungit 1950 alkaen
Kolme kaupunkijärjestelmää
(Jalankulku- joukkoliikenne- ja autokaupunki)

Kolmen kaupunkijärjestelmän teoria yhdistää ajattelutavan ja mallit



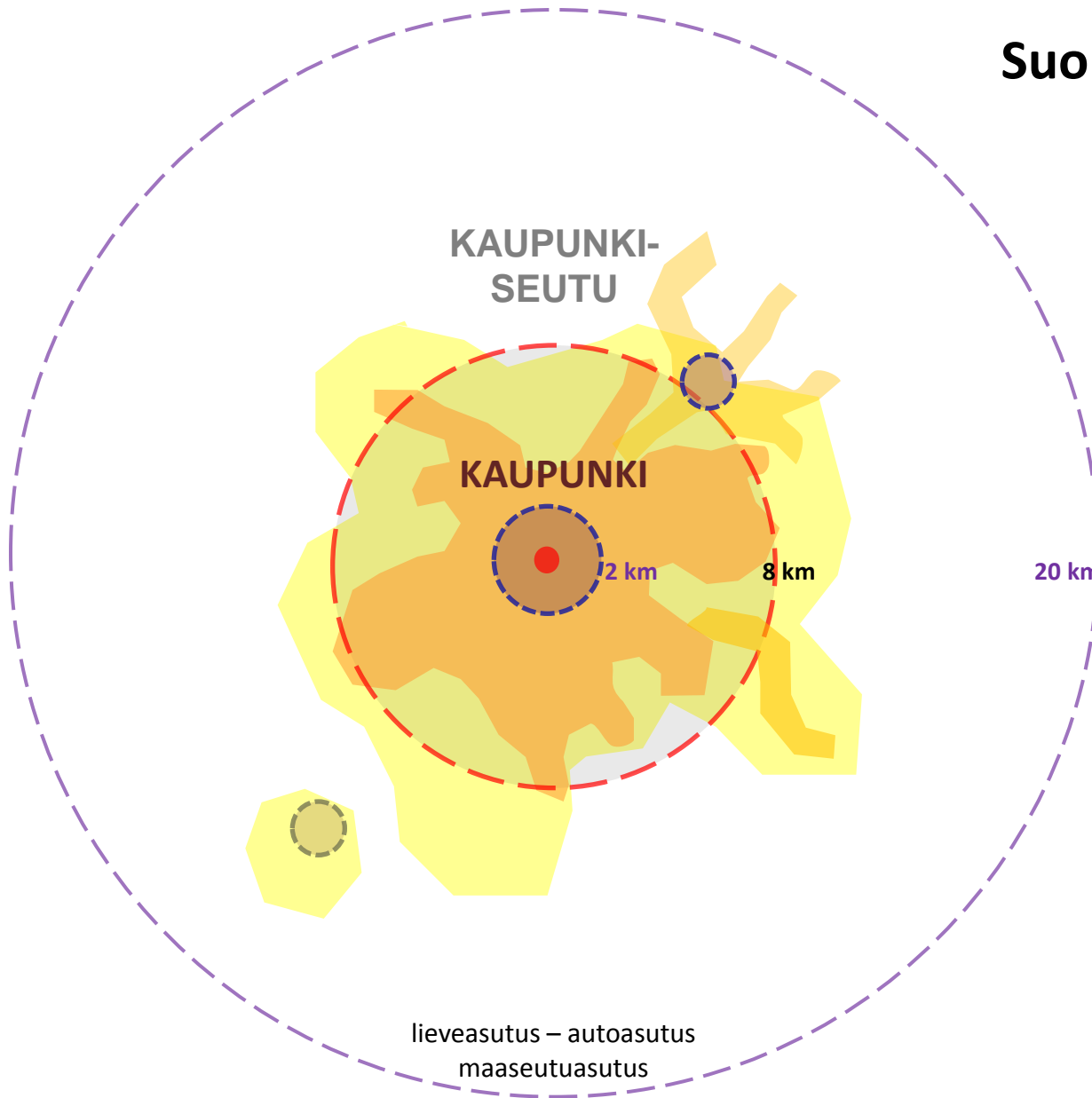
Kaupungit 1950 alkaen
Kolme kaupunkijärjestelmää
(Jalankulku- joukkoliikenne- ja autokaupunki)

Kohdekaupungit

Kolme kaupunkijärjestelmää

Malli

KAUPUNKIJÄRJESTELMÄT
Suomen kohdekaupungit
Yleismalli
PERUSKUVA



- Jalankulkukaupunki*
- Joukkoliikennekaupunki*
- Ulompi joukkoliikennekaupunki, suorat bussiyhteydet*
- Aluekeskus, suorat bussiyhteydet*
- Sisempi autokaupunki*
- Ulompi autokaupunki*
- Kaupunkiseudun kuntakeskus tai aluekeskus, jalankulku- ja autokaupungin yhdistelmä
- Keskusta on kolmen kaupunkijärjestelmän yhdistelmä

MAASEUTU, MUUT KAUPUNGIT JA TAAJAMAT

Kohdekaupungit

Kolme kaupunkijärjestelmää

Historiat

UF project

Four Cities 1960

Walking Cities



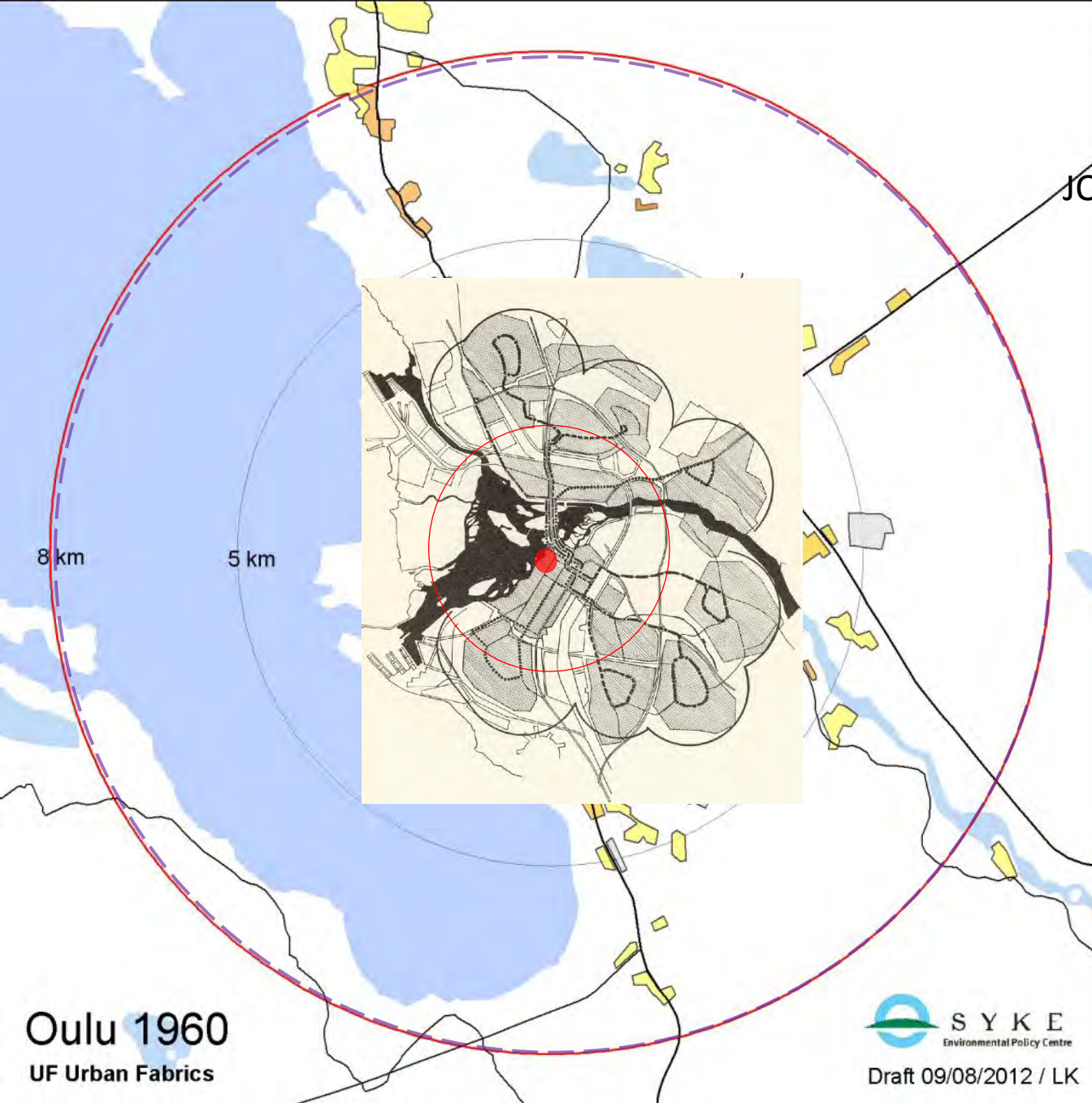
KAUPUNKIJÄRJESTELMÄT

Teoriat

JOUKKOLIIKENNEKAUPUNKI

*Johdinautot ja
bussikaupunginosat*

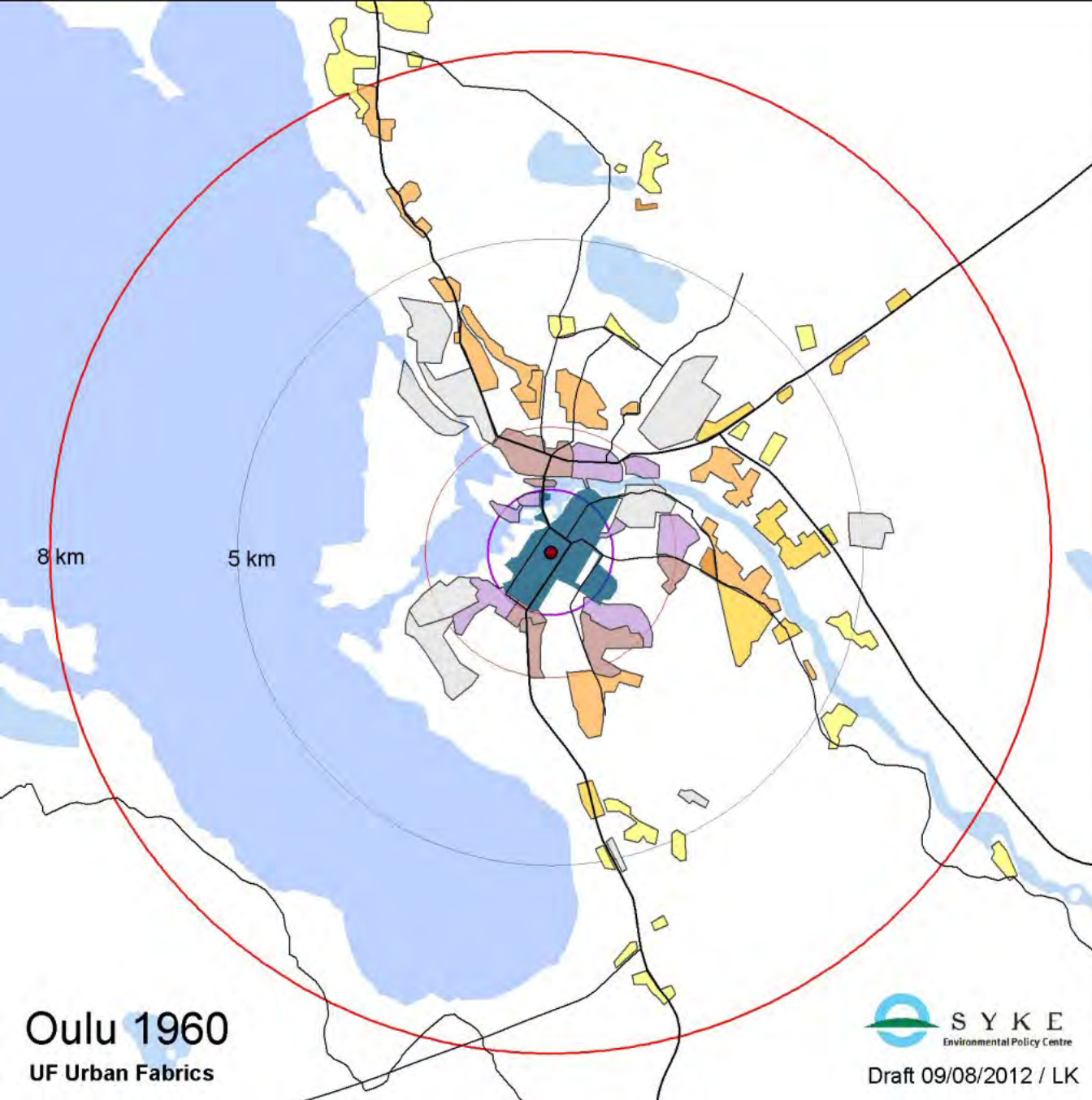
Oulun yleiskaavan
bussikaupunginosien
suunnitelma 1952



Oulu 1960
UF Urban Fabrics

 SYKE
Environmental Policy Centre

Draft 09/08/2012 / LK



Areas_1960

SubFabric

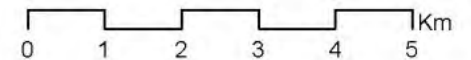
- W (Walking City)
- WE
- WEB
- B (Bus City)
- BC
- CB
- C (Car City)
- CD
- WS (Sub Center)
- WSB
- CW
- P (Production)

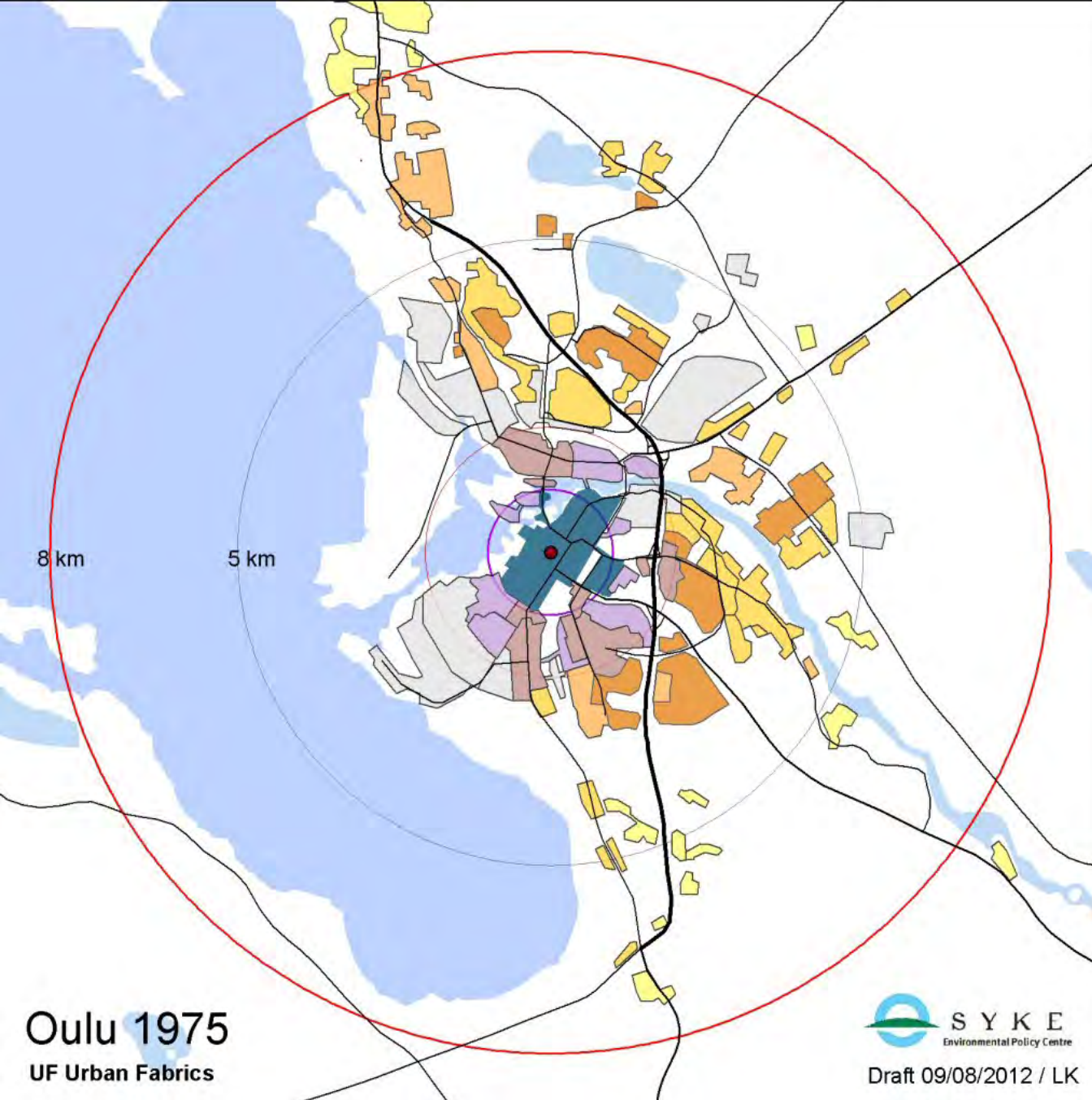
8 km

5 km

Oulu 1960
UF Urban Fabrics

 **SYKE**
Environmental Policy Centre
Draft 09/08/2012 / LK





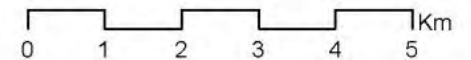
Areas_1975

SubFabric

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Oulu 1975
UF Urban Fabrics

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Environmental Policy Centre
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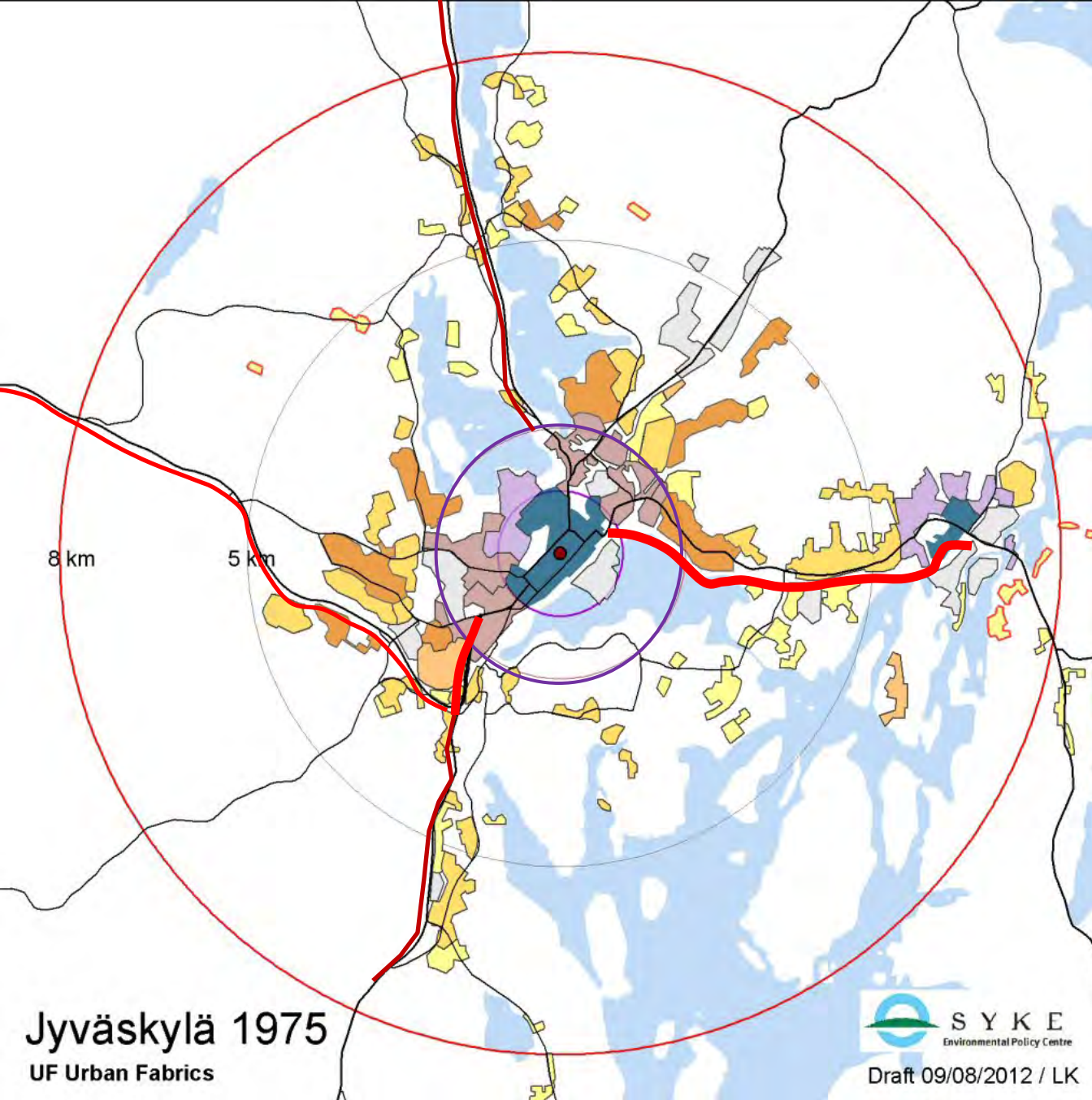


UF projekti

Kohdekaupungit
1960
Jyväskylä

Kaupunkialueen
väylät 1960 ja
suunnitelmat





Areas_1975

SubFabric

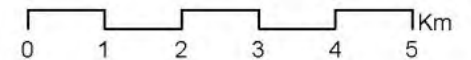
- W (Walking City)
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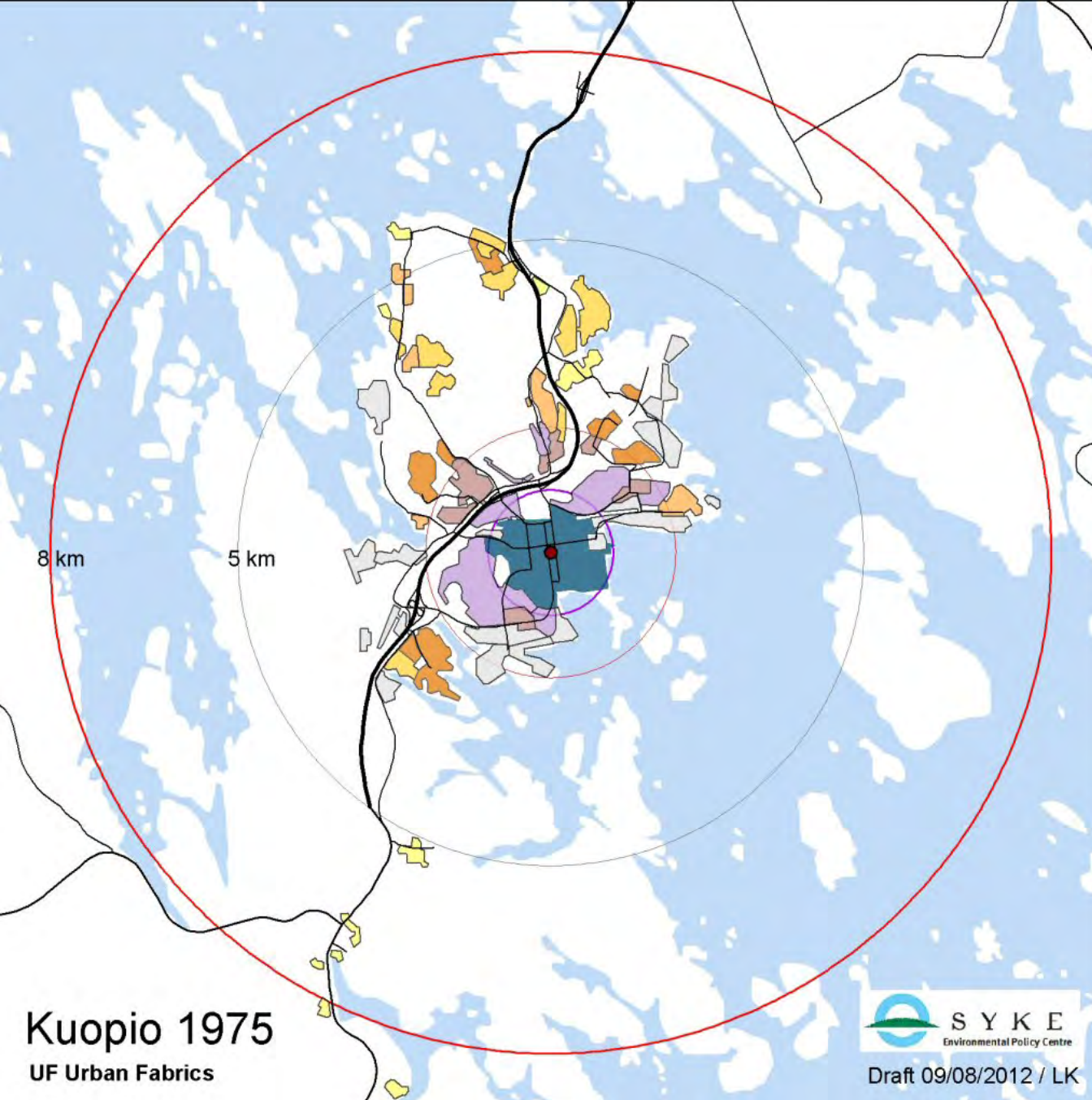
Jyväskylä 1975

UF Urban Fabrics



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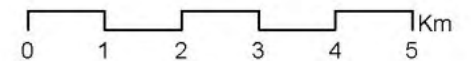
Areas_1975

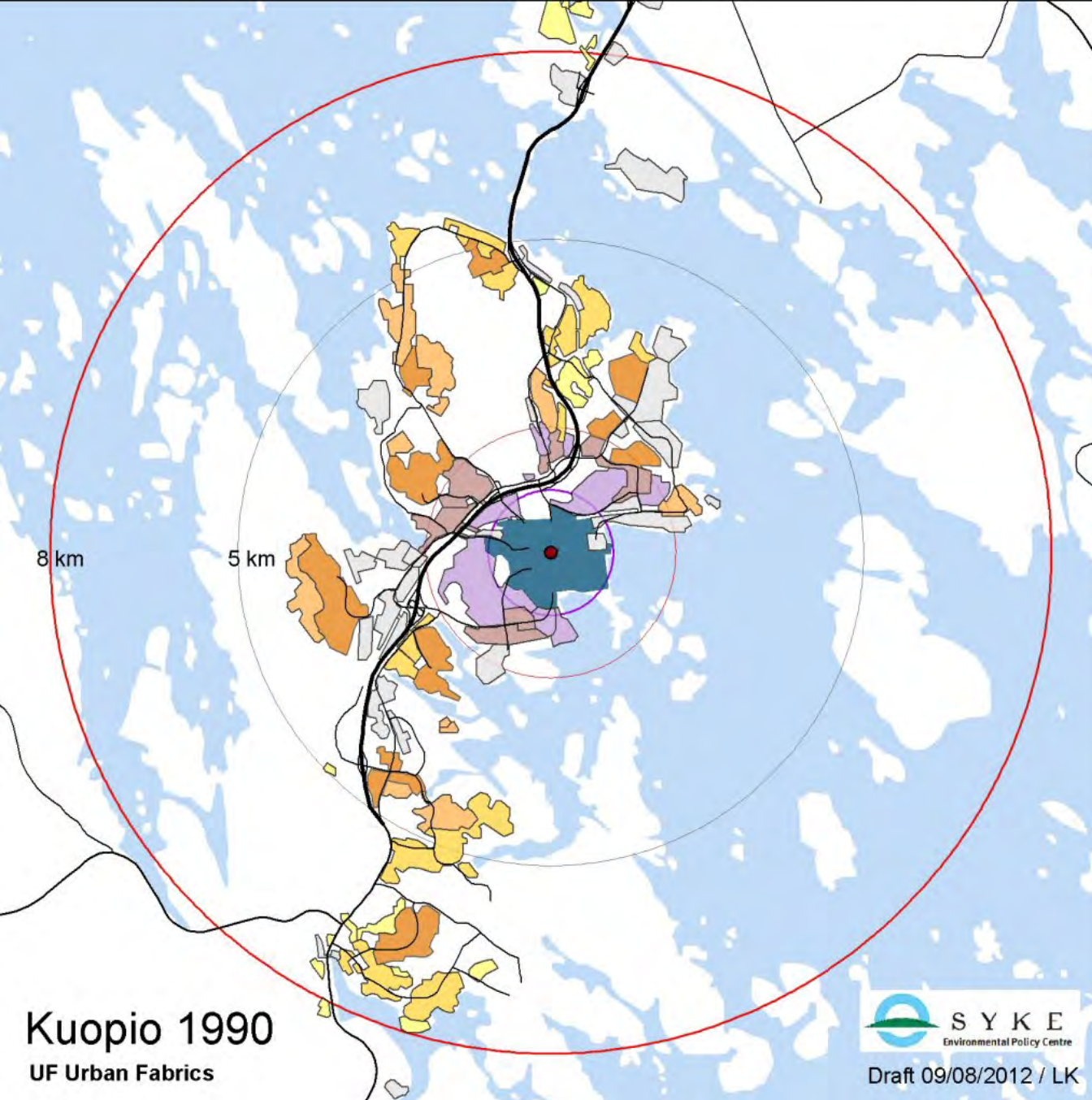
SubFabric

- W (Walking City)
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- BC
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- C (Car City)
- CD
- WS (Sub Centre)
- WSB
- CW
- P (Production)

Kuopio 1975
UF Urban Fabrics

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Areas_1990

SubFabric

- W (Walking City)
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- CW
- P (Production)

8 km

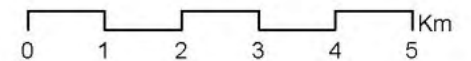
5 km

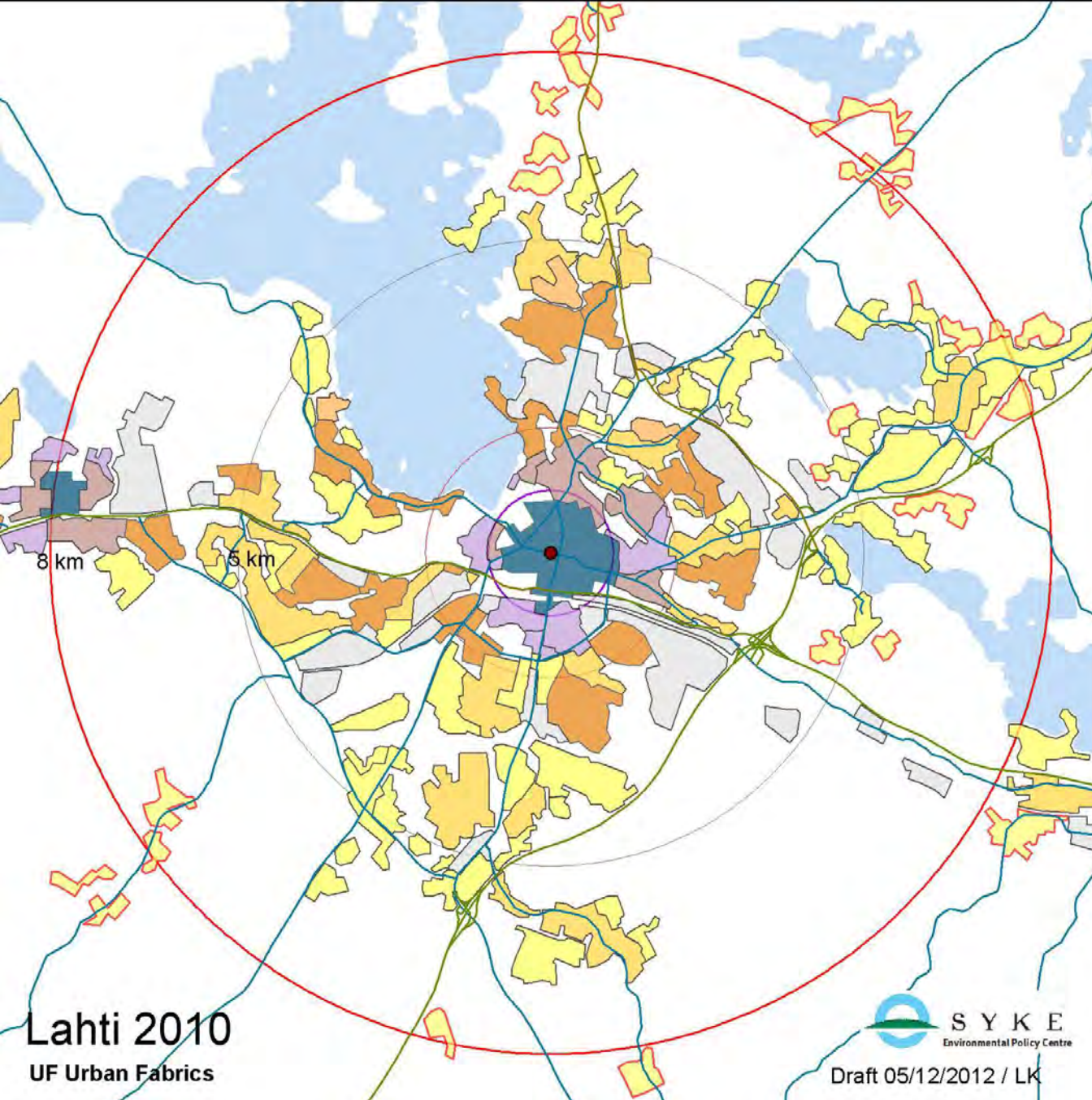
Kuopio 1990

UF Urban Fabrics



Draft 09/08/2012 / LK





Lahti 2010

- Traffic_2011_highways
- Traffic_2011_main_roads
- Traffic_2011_roads

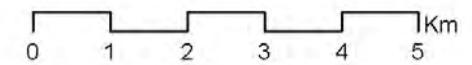
Areas_2010

SubFabric

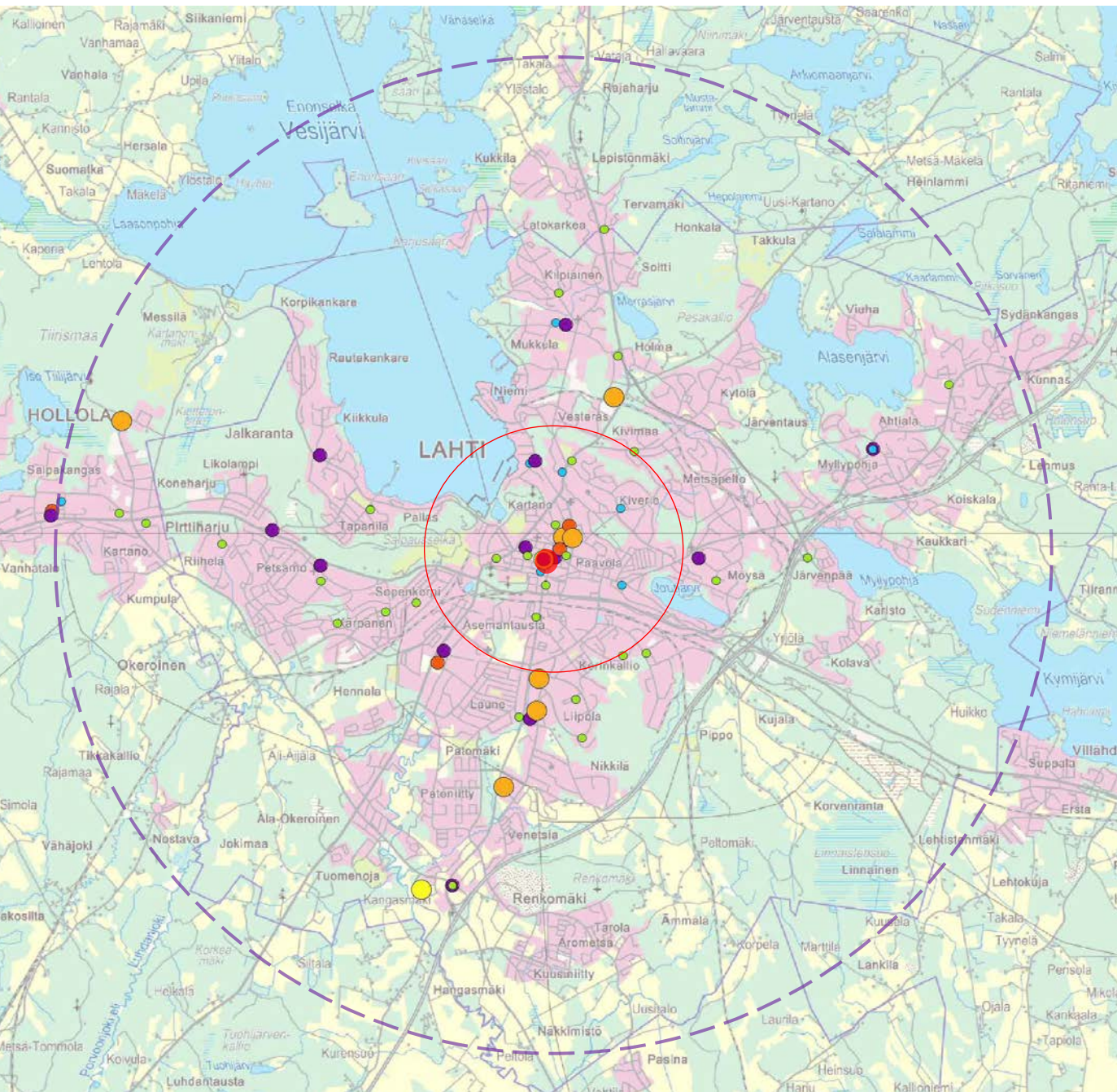
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- P (Production)
- PD

Lahti 2010
UF Urban Fabrics

S Y K E
Environmental Policy Centre
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Lahti



Päivittäistavarakaupat 2011

Toimialaluokka (TOL2008)

- Tavaratalot (yli 2500 m²)
- Itsepalvelutavaratalot (yli 2500 m²)
- Pienoistavaratalot ja muut erikoistuneet myymälät (alle 2500 m²)
- Isot supermarketit (yli 1000 m²)
- Pienet supermarketit (400-1000 m²)
- Valintamyymälät (yli 100, alle 400 m²)

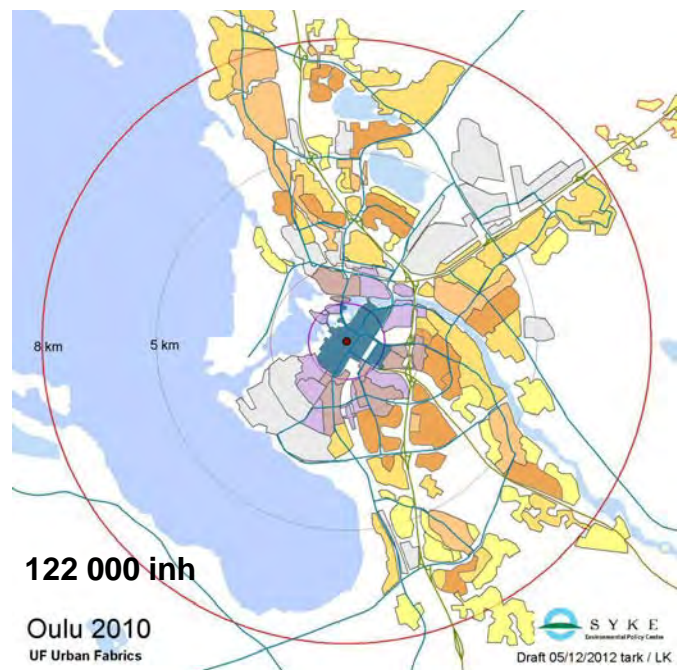
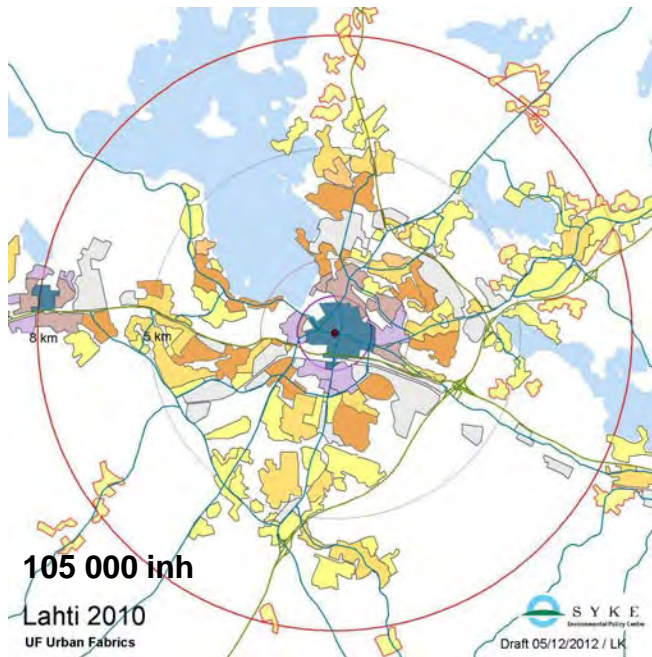
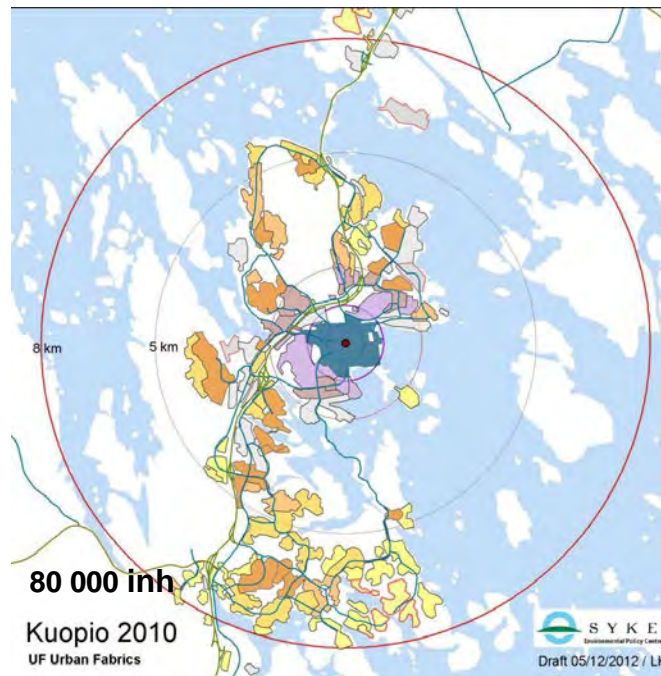
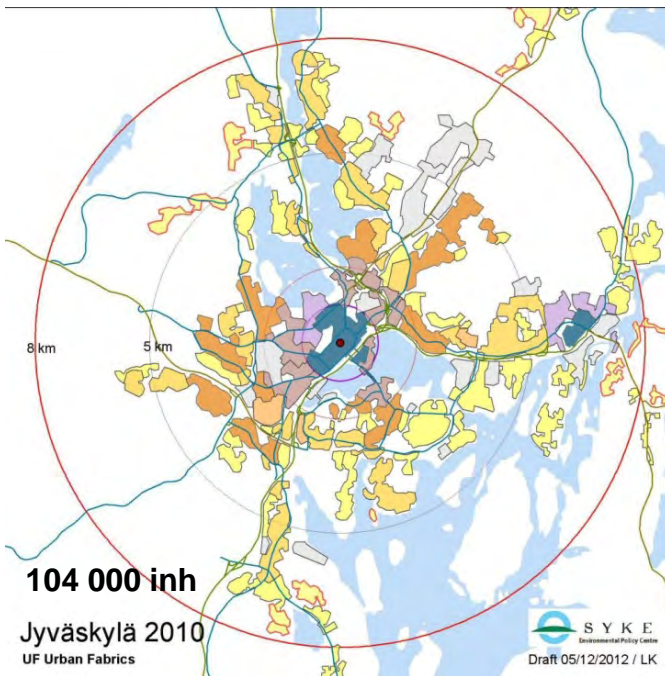
UF projekti

Kohdekaupungit 2010

*Auto-,
joukkoliikenne-
ja jalankulku-
kaupunkeja*

Alueet 2010

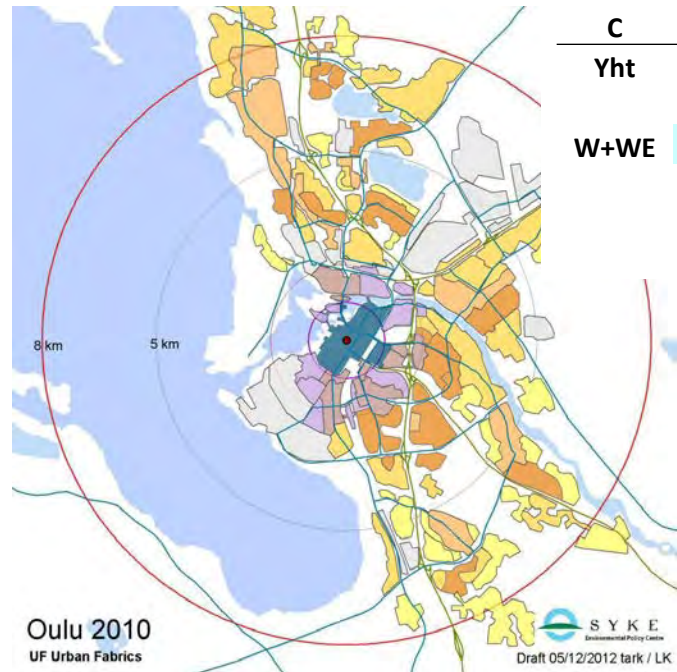
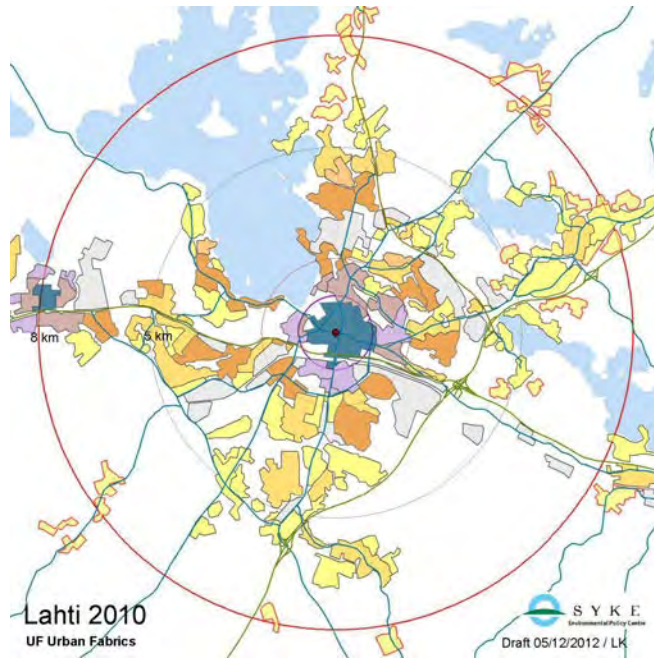
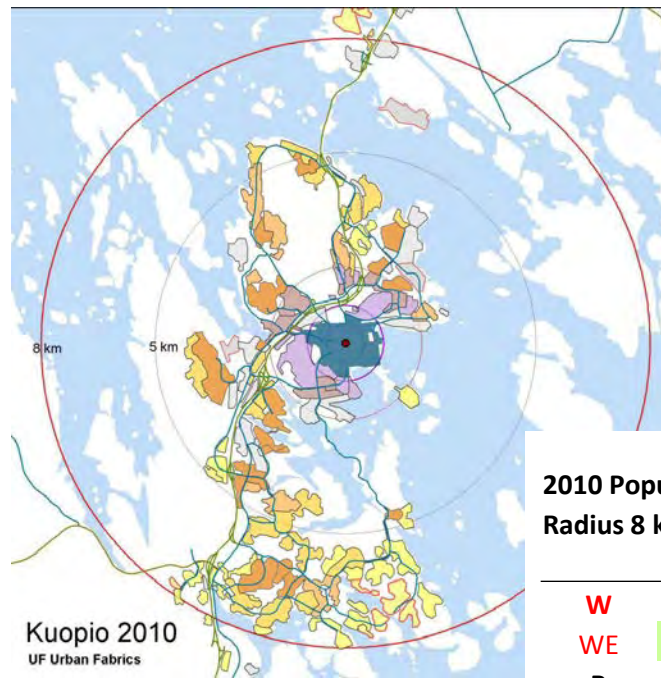
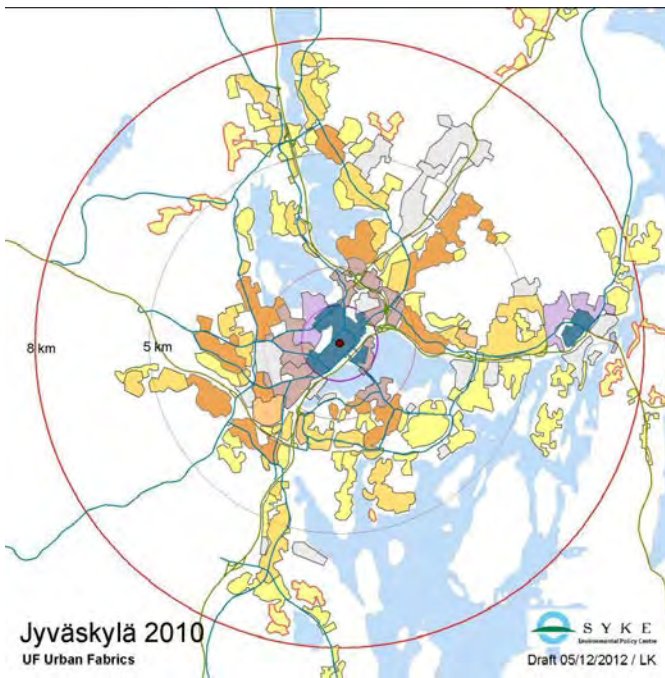
- W (Walking City)
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UF project

Four Cities 2010

Car- Transit- and Walking Cities



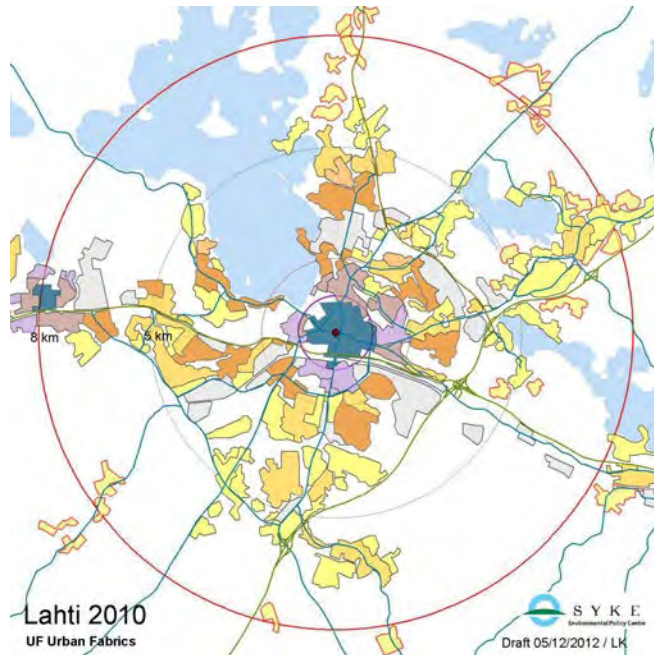
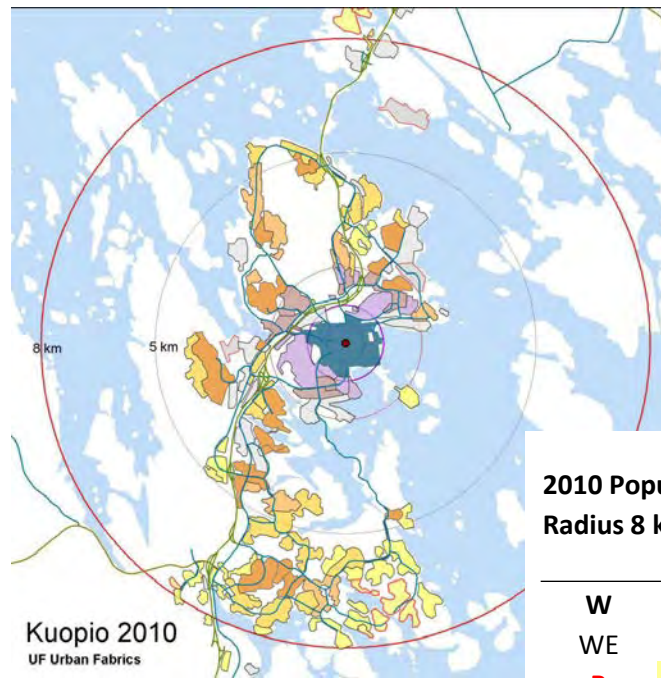
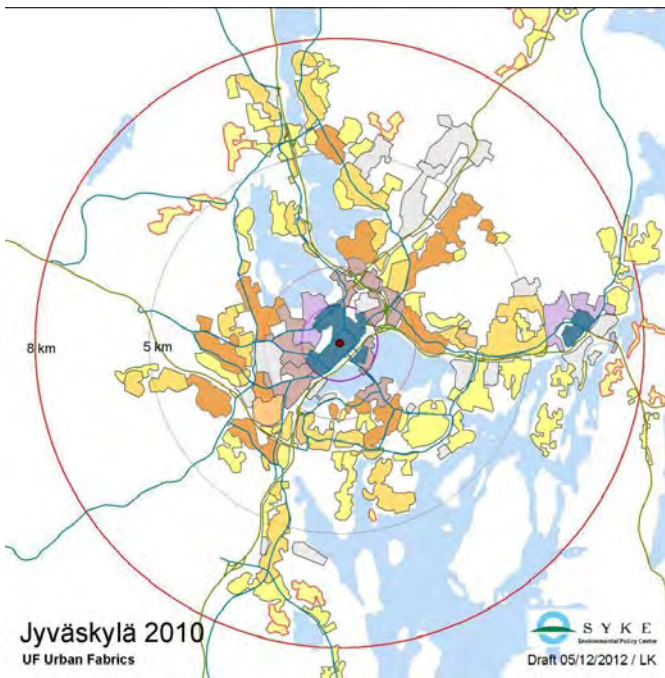
**2010 Population
Radius 8 km**

	Jkl	Kuopio	Lahti	Oulu
W	11039	14305	14192	11969
WE	16724	13318	14291	18057
B	35020	32948	40065	48040
C	41577	18876	40492	44167
Yht	104360	79447	109040	122233
W+WE	27763	27623	28483	30026

UF project

Four Cities 2010

Car- Transit- and Walking Cities



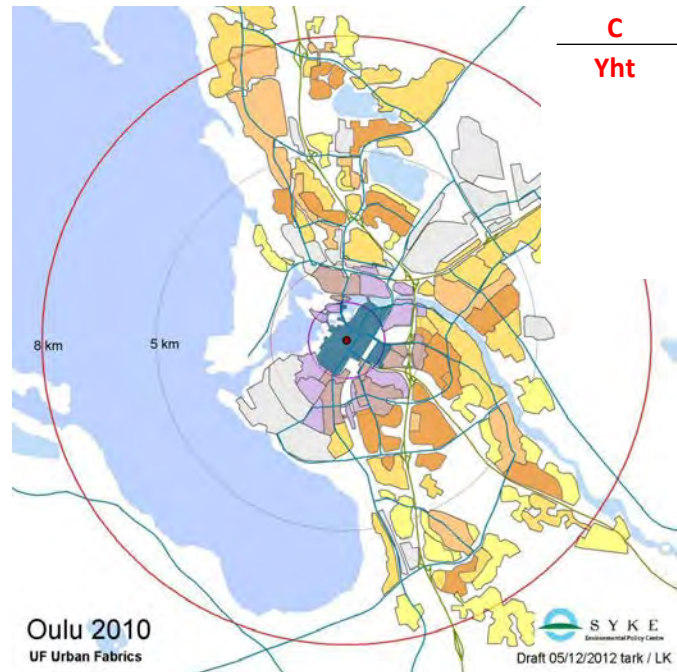
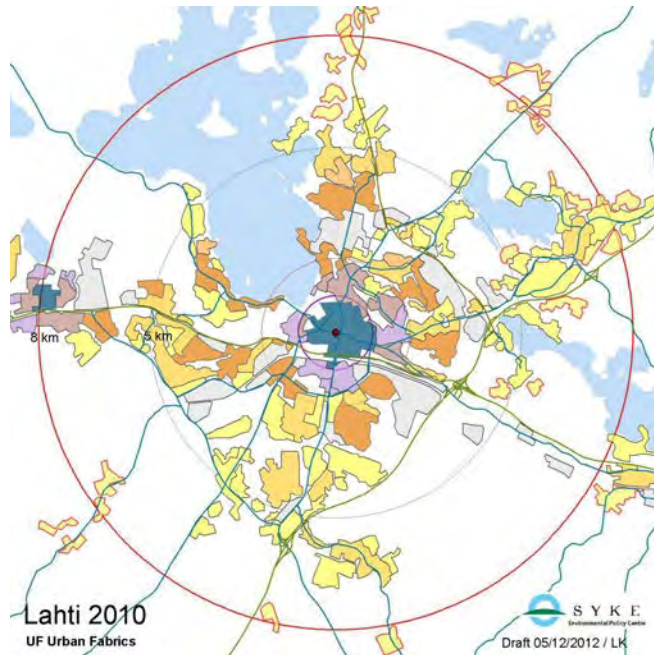
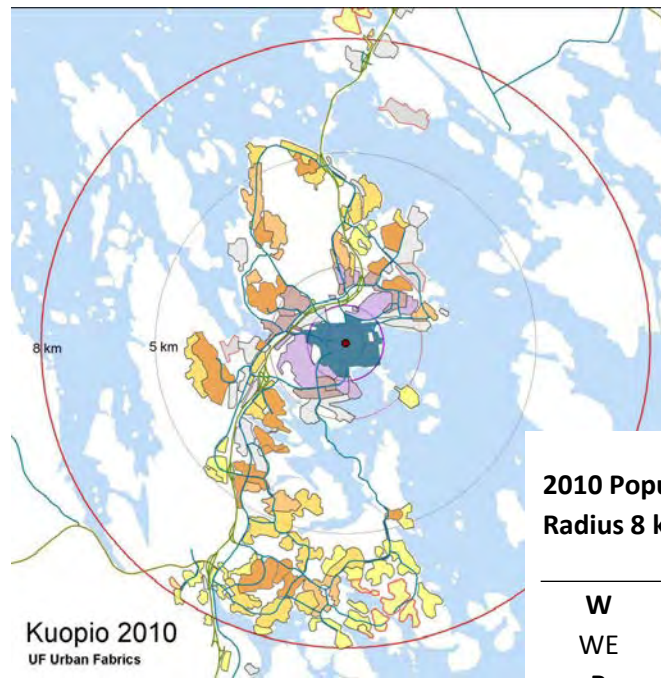
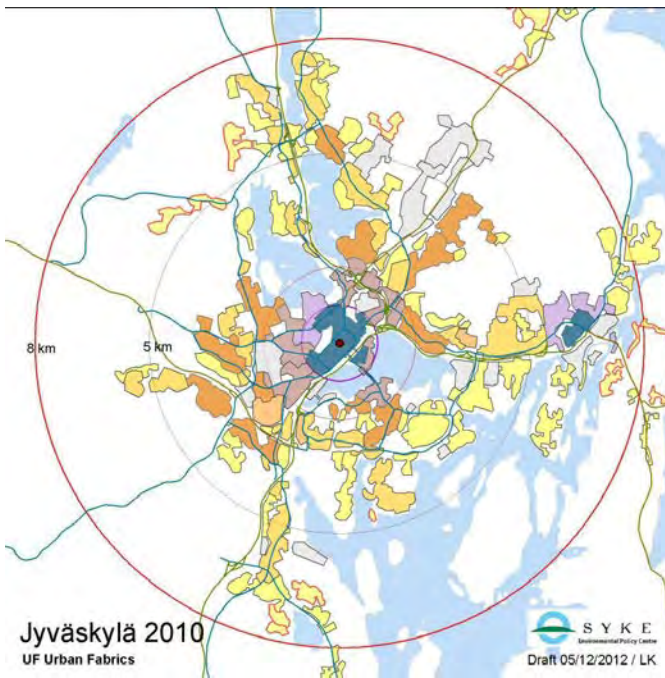
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UF project

Four Cities 2010

Car- Transit- and Walking Cities



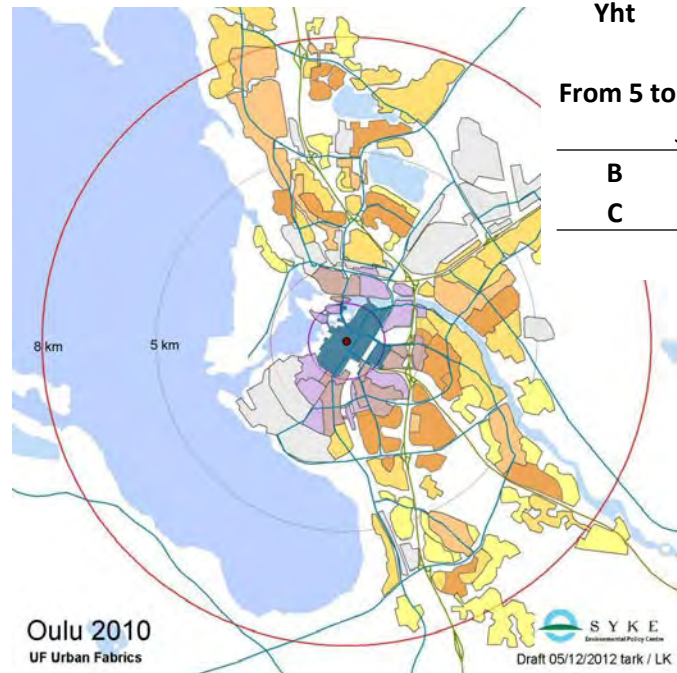
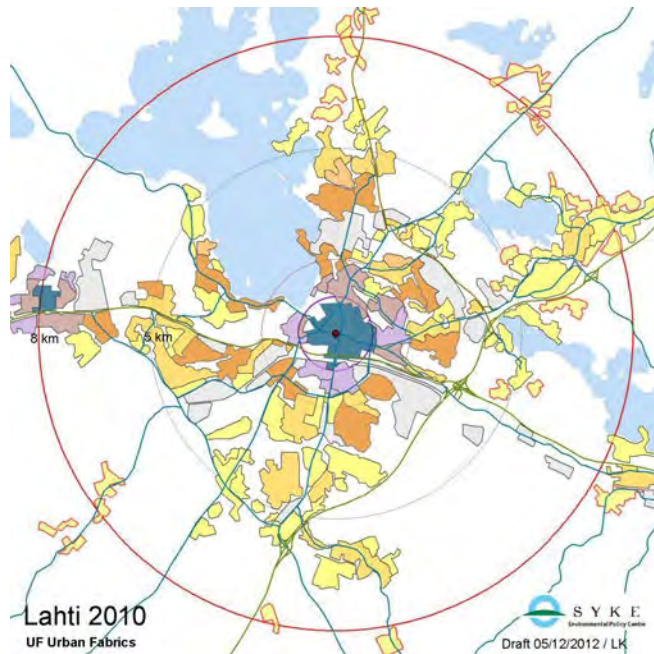
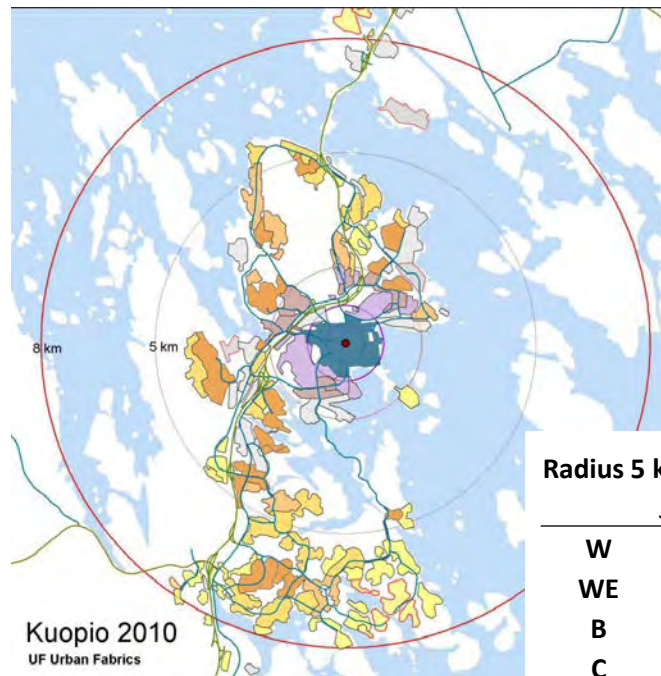
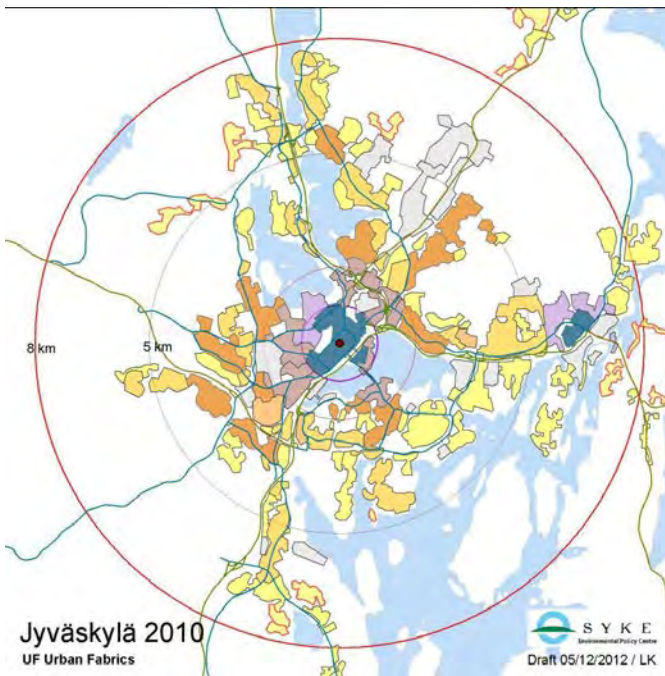
2010 Population
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UF project

Four Cities 2010

Car- Transit- and Walking Cities



Radius 5 km

	Jkl	Kuopio	Lahti	Oulu
W	11039	14305	14192	11969
WE	16724	13318	14291	18057
B	32108	26690	33187	29689
C	25724	4579	23081	17950
Yht	85595	58892	84751	77665

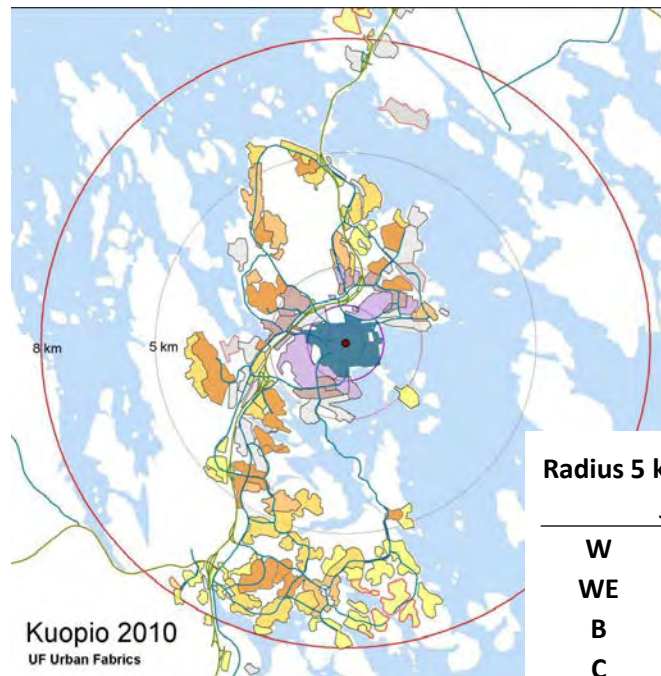
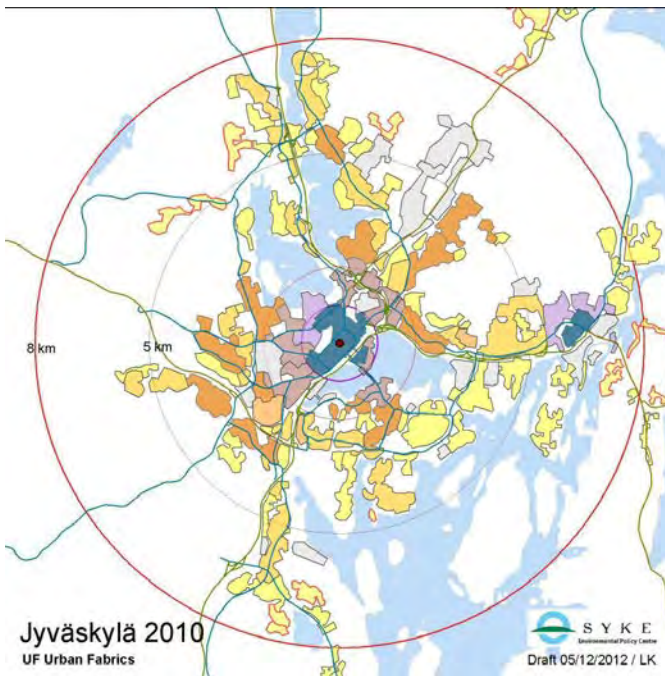
From 5 to 8 km

	Jkl	Kuopio	Lahti	Oulu
B	2912	6258	6878	18351
C	15853	14297	17411	26217
	18765	20555	24289	44568

UF project

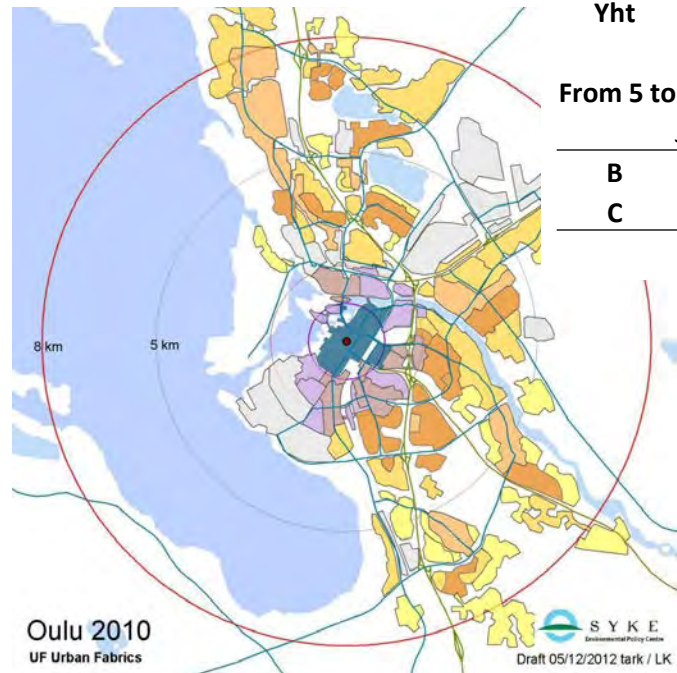
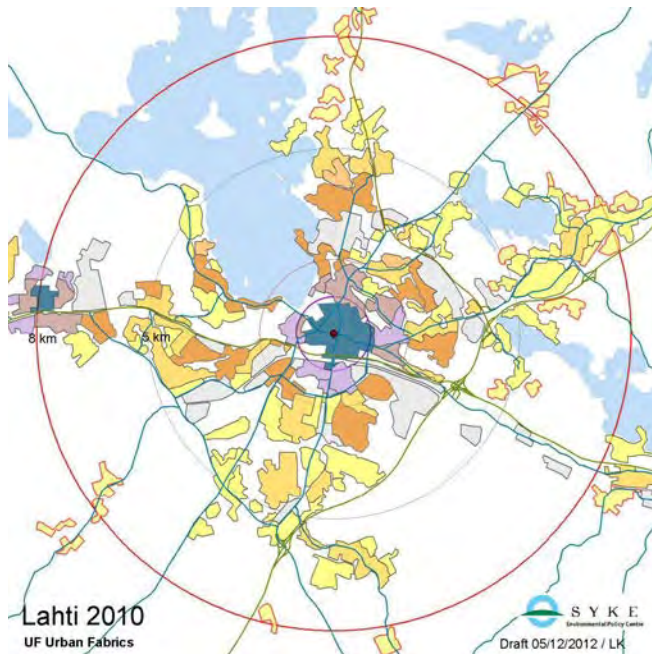
Four Cities 2010

Car- Transit- and Walking Cities



Radius 5 km

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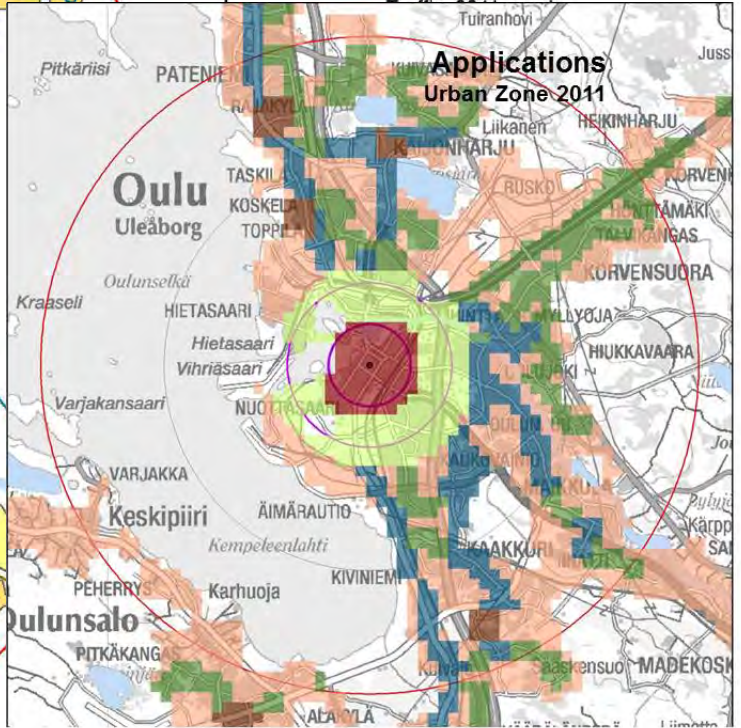
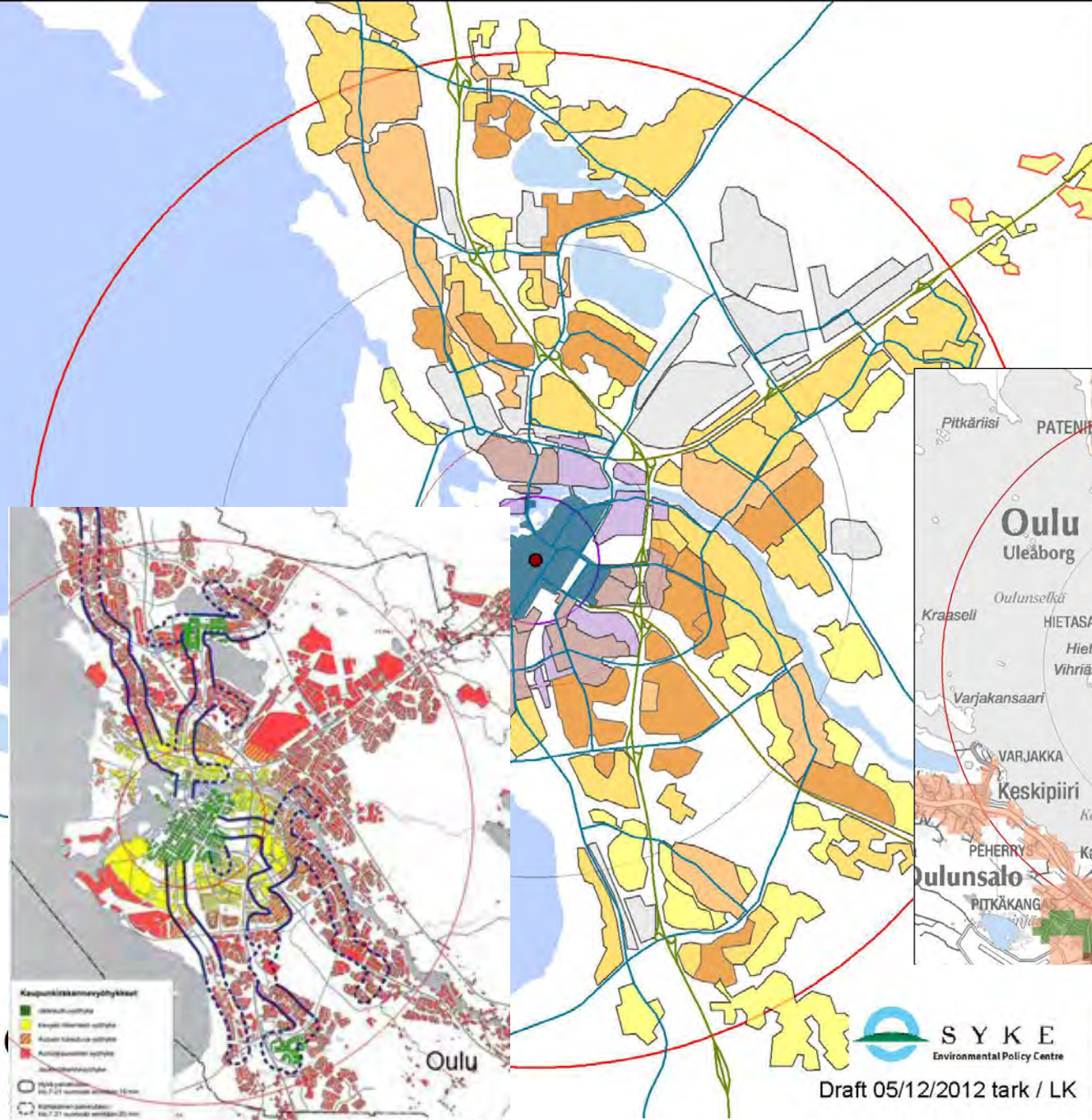


From 5 to 8 km

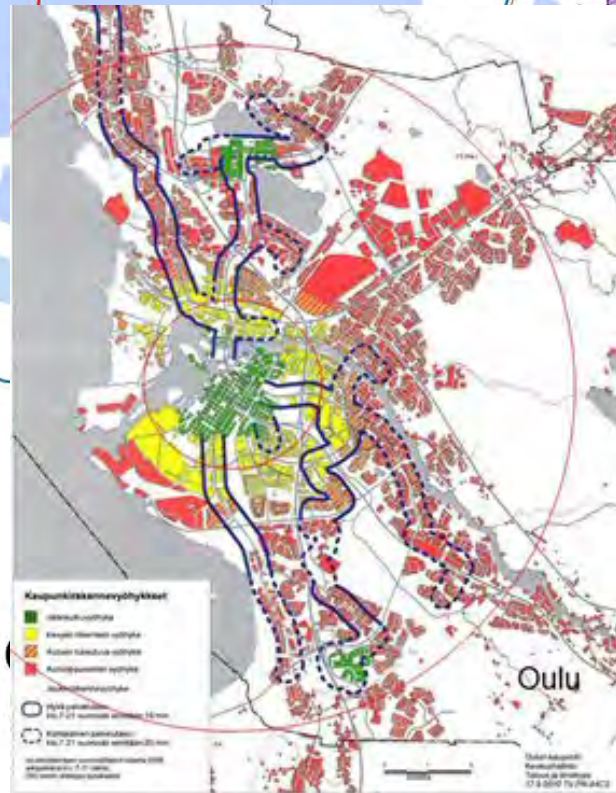
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Oulu 2010

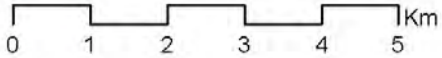
- Traffic_2011_highways
- Traffic_2011_main_roads



source: UZ-Urban Zone Syke 2011



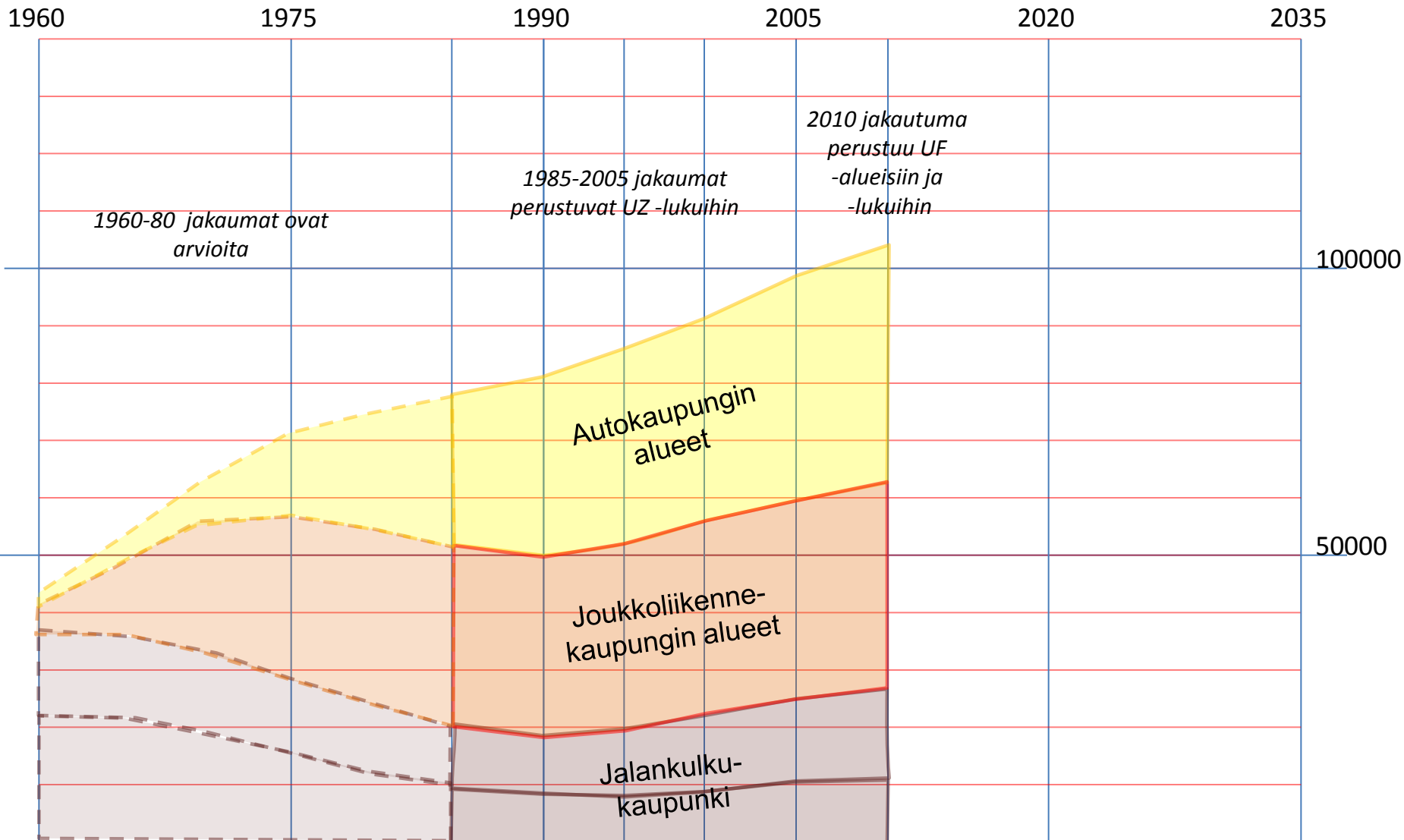
Draft 05/12/2012 tark / LK



Kaupunkijärjestelmien alueet

Asukkaat 2010 ja arvioitu kehitys 1960-2005

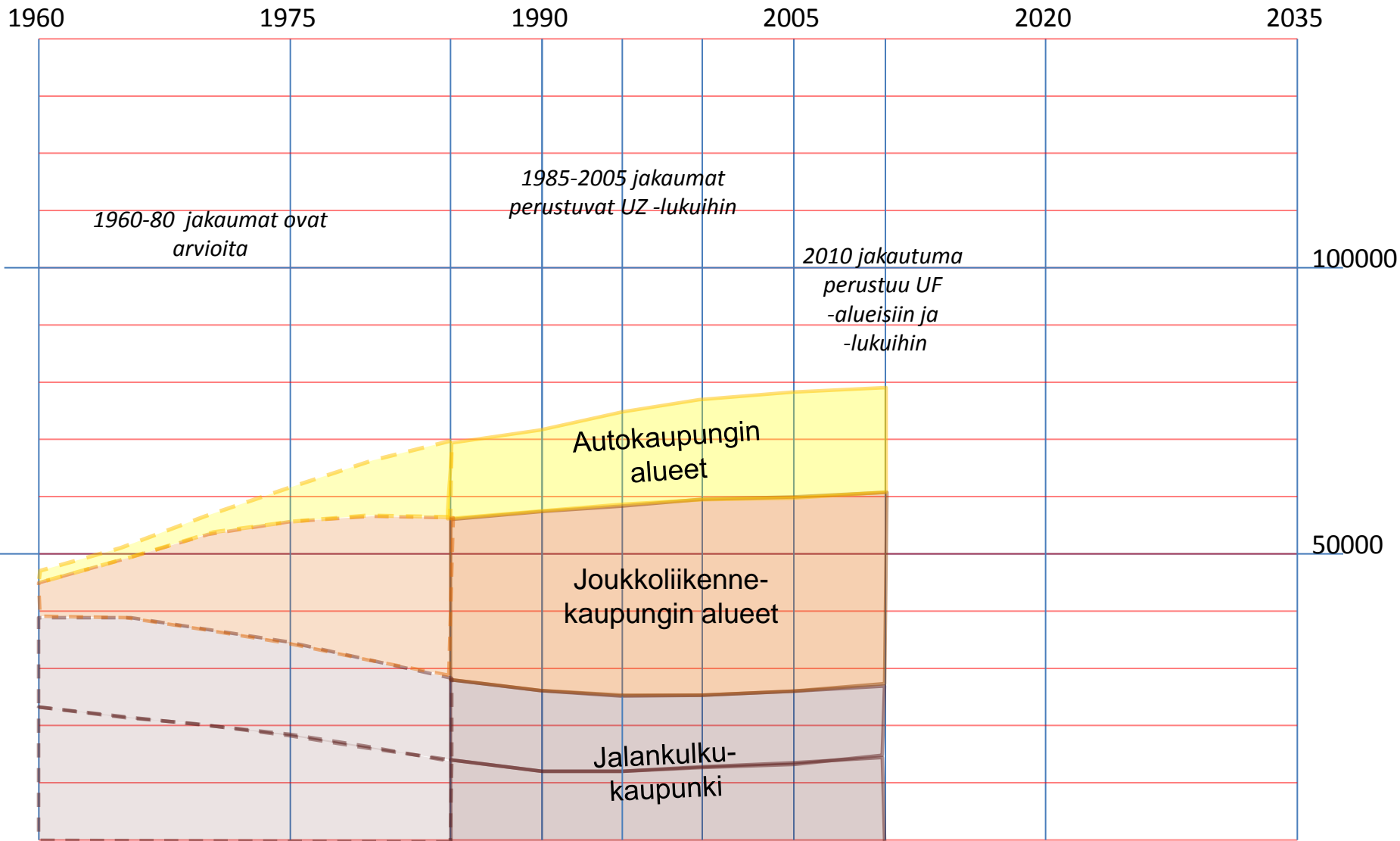
säde 8 km



Kaupunkijärjestelmien alueet

Asukkaat 2010 ja arvioitu kehitys 1960-2005

säde 8 km



Kuopio

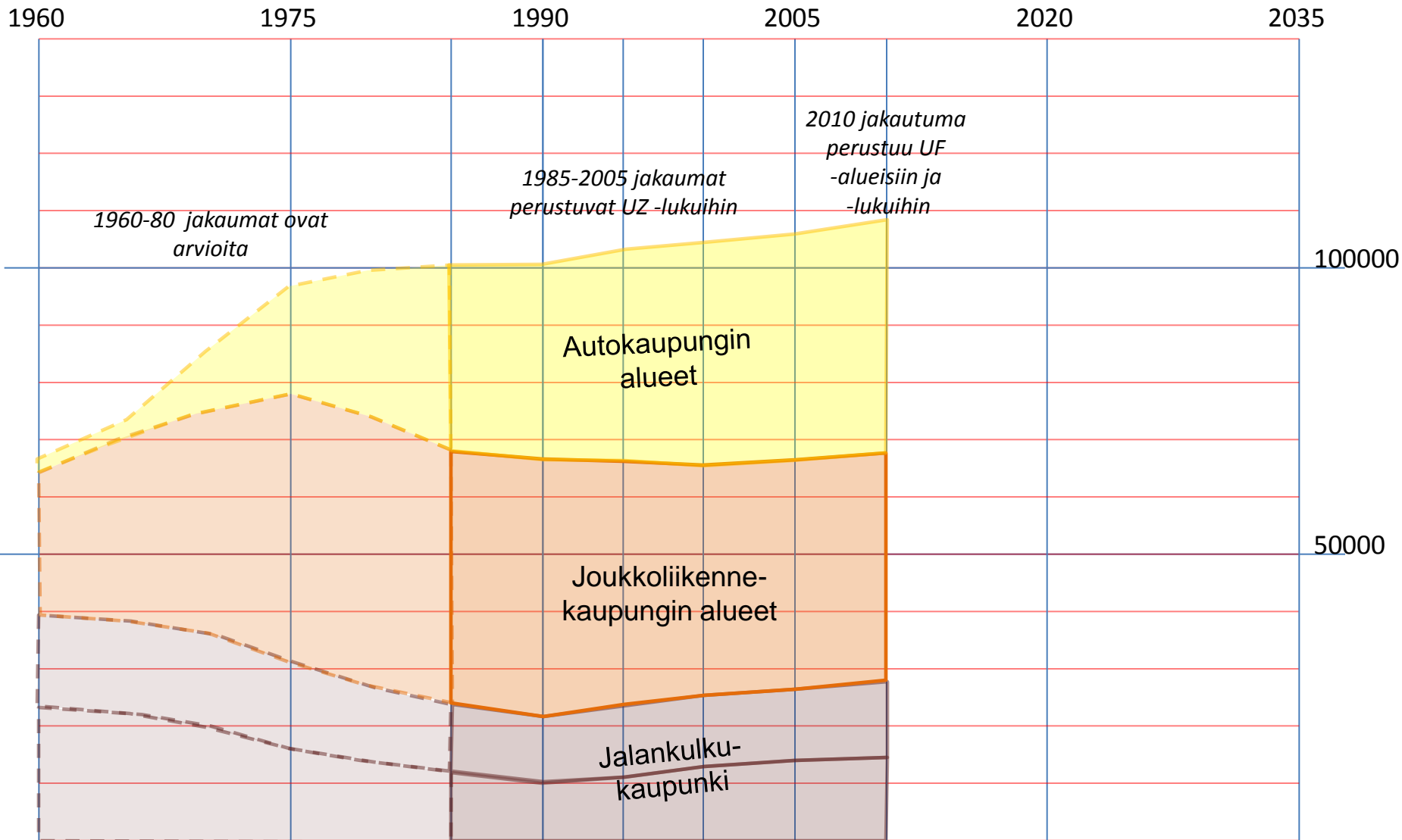
lähde: SYKE / UZ ja UF / Maija Tiitu 12.8.2013

11.9.2013 UF Leo Kosonen

Kaupunkijärjestelmien alueet

Asukkaat 2010 ja arvioitu kehitys 1960-2005

säde 8 km



Lahti

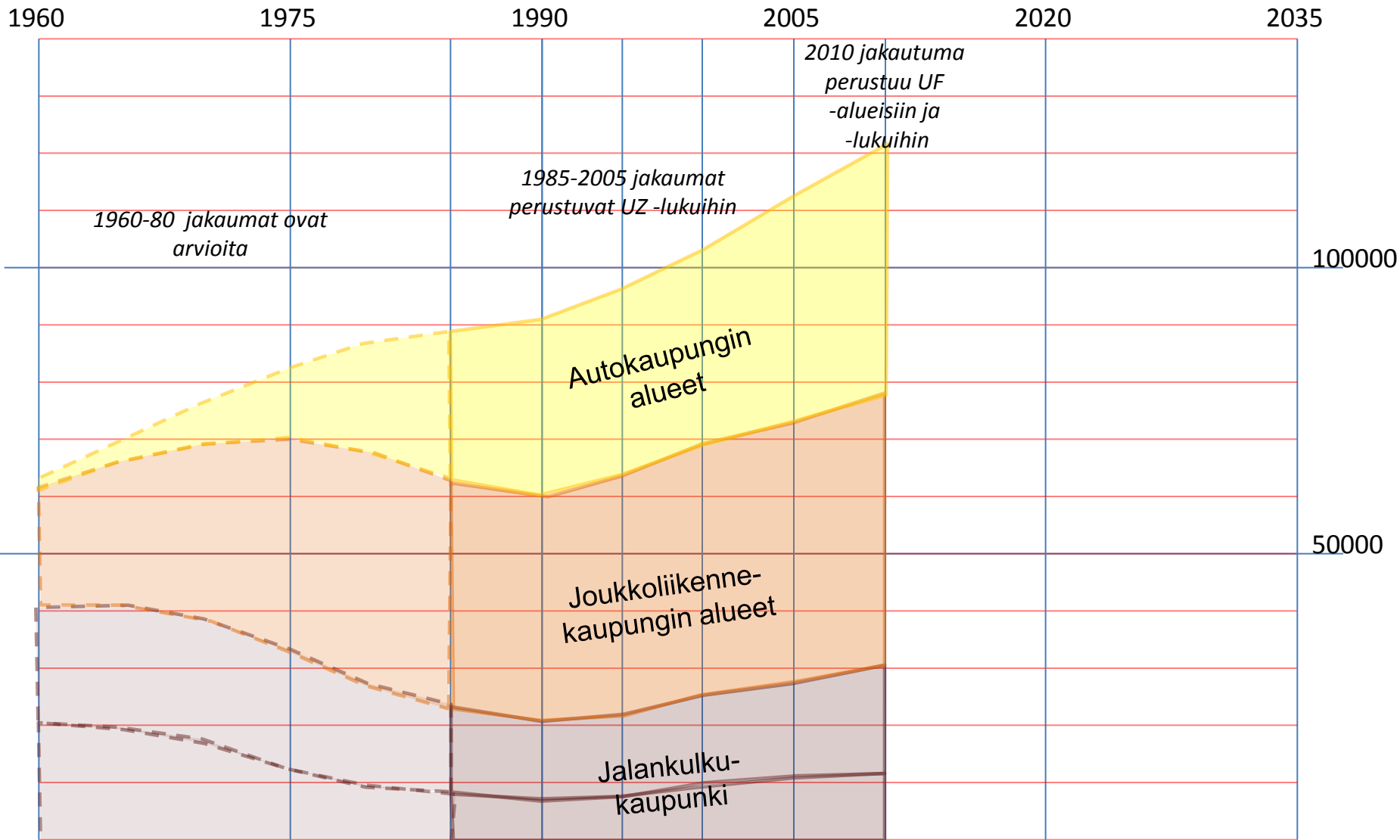
lähde: SYKE / UZ ja UF / Maija Tiitu 12.8.2013

11.9.2013 UF Leo Kosonen

Kaupunkijärjestelmien alueet

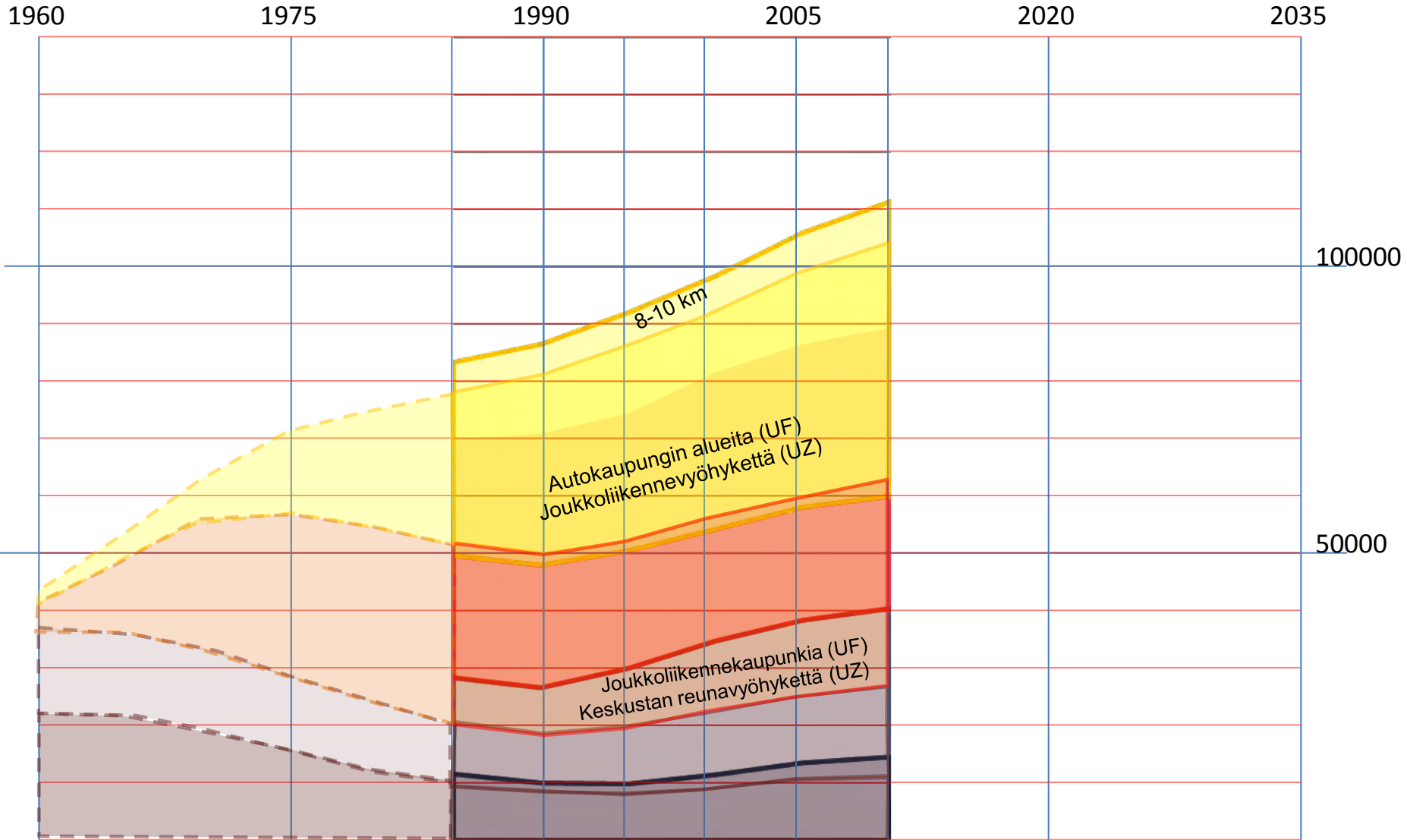
Asukkaat 2010 ja arvioitu kehitys 1960-2005

säde 8 km



UF- ja UZ alueet

Asukkaat 2010 ja arvioitu kehitys 1960-2005
säteet 8 km (UF) ja 10 km (UZ)



Jyväskylä

1985 1990 1995 2000 2005 2010

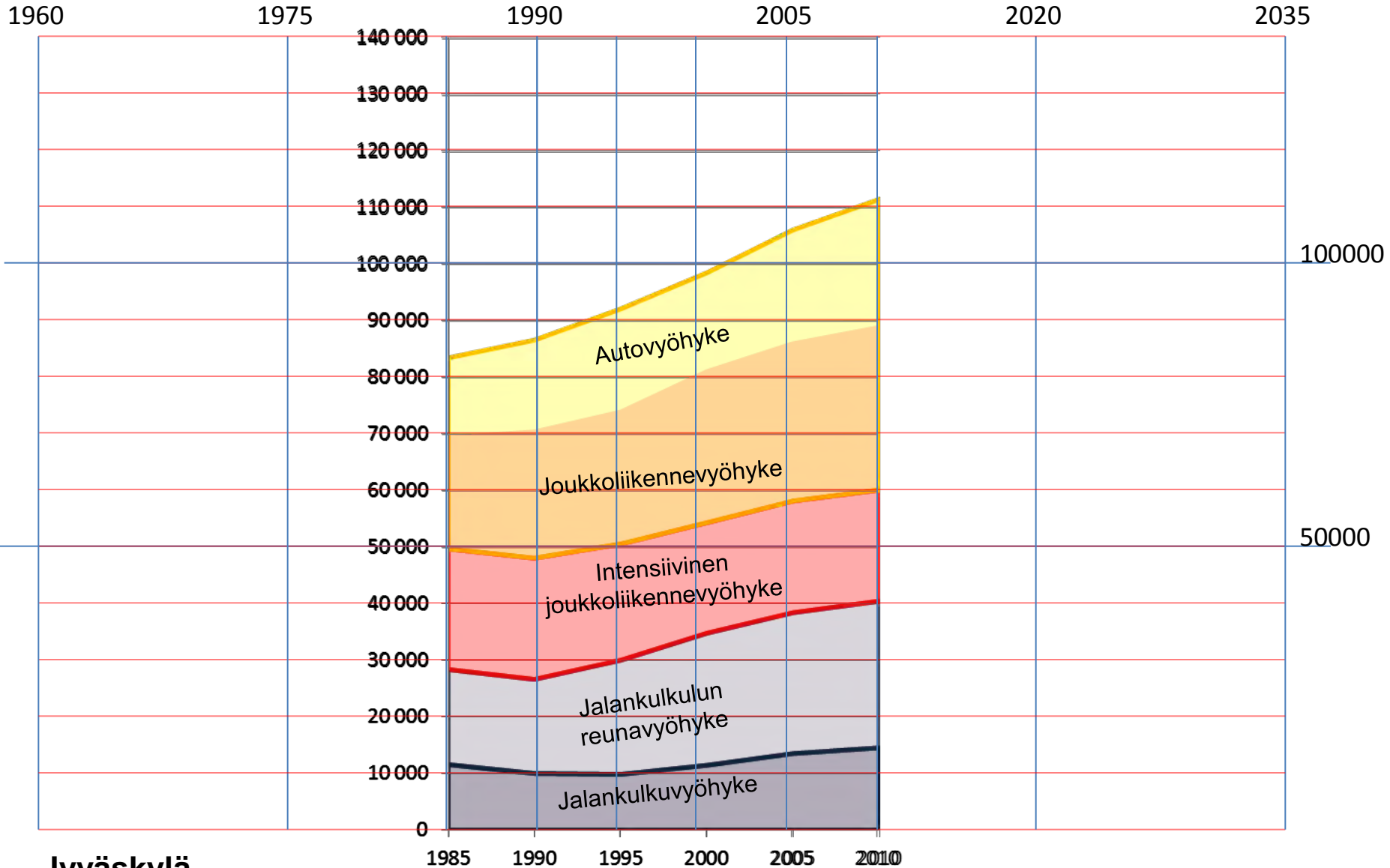
lähde: SYKE / Maija Tiitu 12.8.2013

11.9.2013 UF Leo Kosonen

Urban Zone -liikennevyöhykkeet

Asukasmäärät 1985-2010

säde 10 km



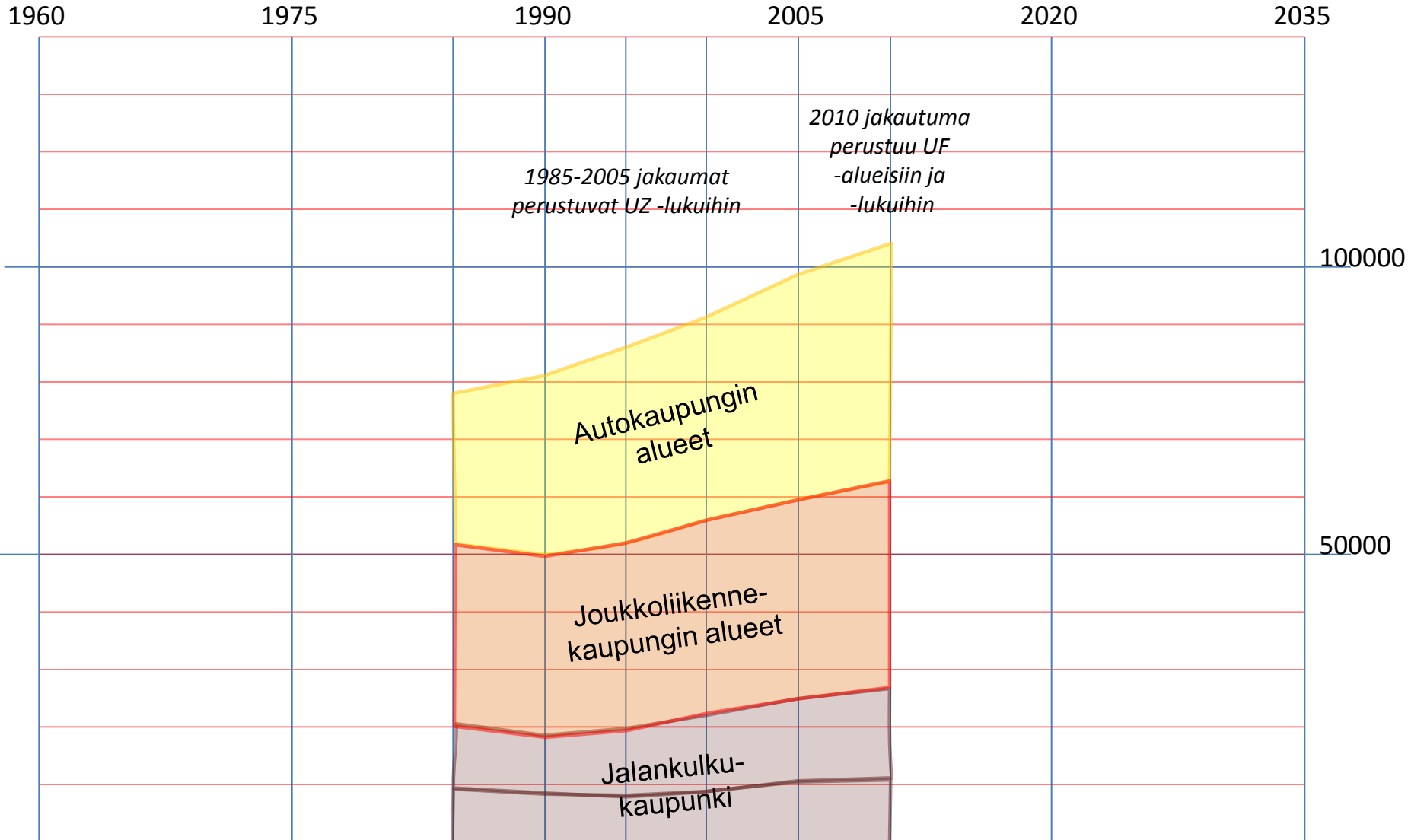
Jyväskylä

lähde: SYKE / Maija Tiitu 12.8.2013

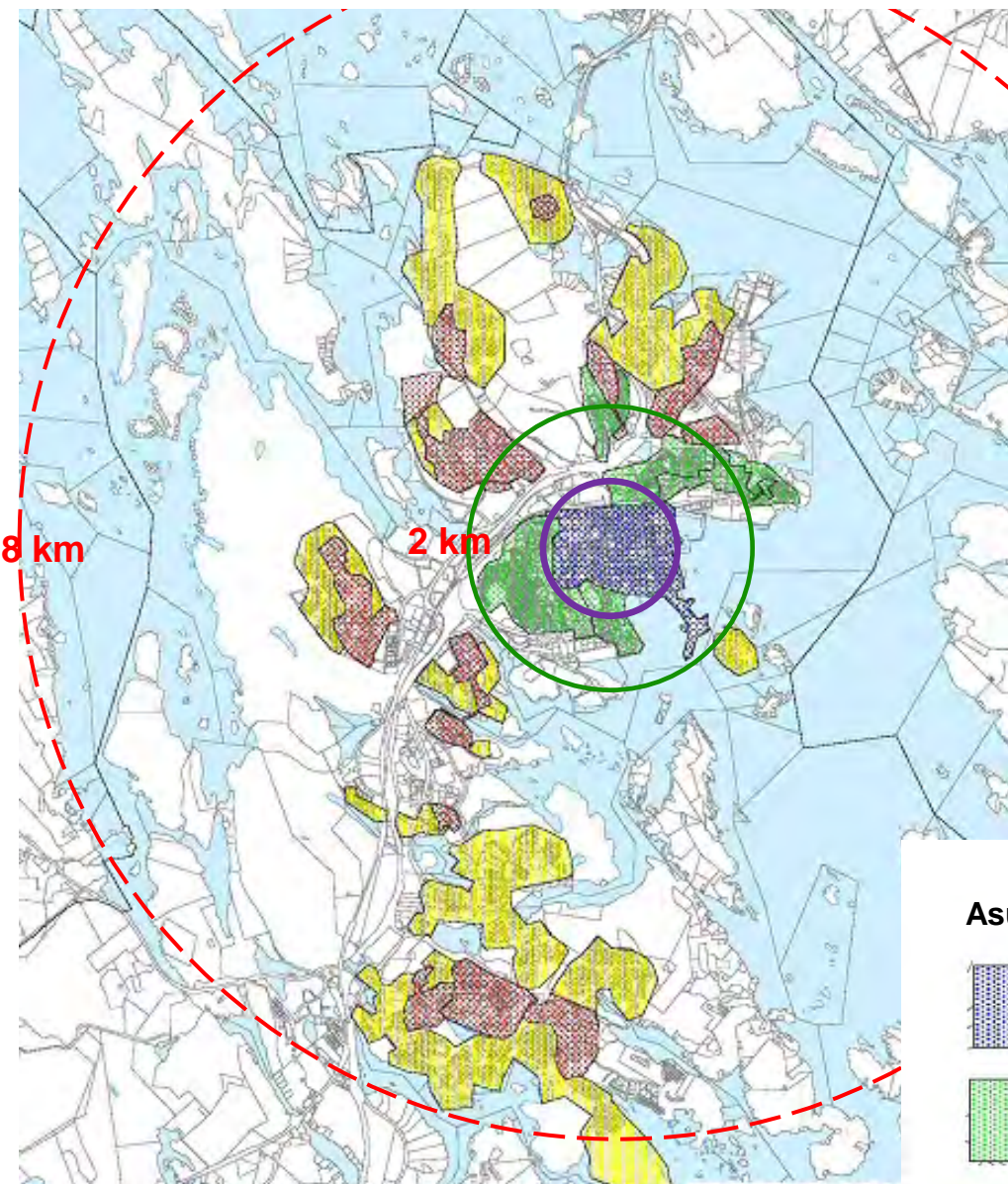
11.9.2013 UF Leo Kosonen

UF -kaupunkijärjestelmien alueet

Asukkaat 2010 ja arvioitu kehitys 1960-2005
säde 8 km



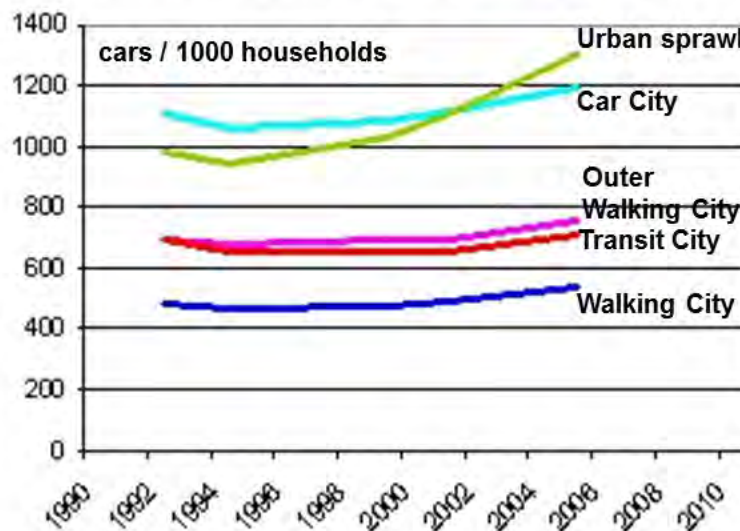
Kuopion malli



Uusi analyysimalli

Kaupunkijärjestelmät on tunnistettu ja niitä on tutkittu vuodesta 1993 lähtien

Motorization 1990-2006 by Areas of the Fabrics



Asuntoalueet 2001 kaupunkijärjestelmittäin



Kohdekaupungit

Kolme kaupunkijärjestelmää

Haasteet

Haasteena maan niukkuus

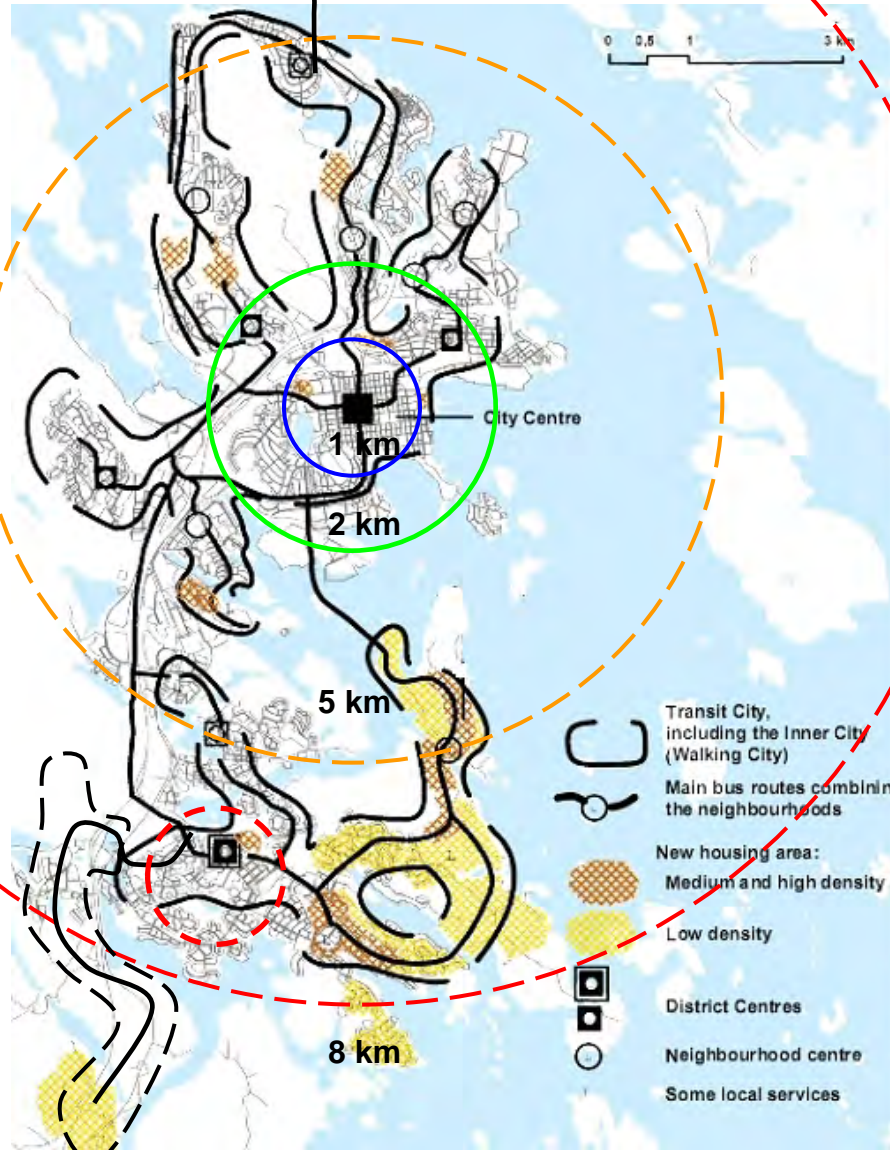
Vesien runsaus ja arvokas luonto rajoittavat rakentamismahdollisuuksia

Viiden kilometrin säteellä vain alle 1/3 alueesta on voitu ottaa käyttöön, 5-10 kilometrin vyöhykkeellä osuus on vielä tätä pienempi



1 km	3 / 3 km ²
5 km	25 / 80 km ²
10 km	70 / 310 km ²

Kuopio Model Finland



Future Model 2020

Finger Model of Kuopio (2000)

Fingers of the Walking- and Transit City Fabrics need to be repaired and regenerated.

This promotes sustainable and healthy urban development.

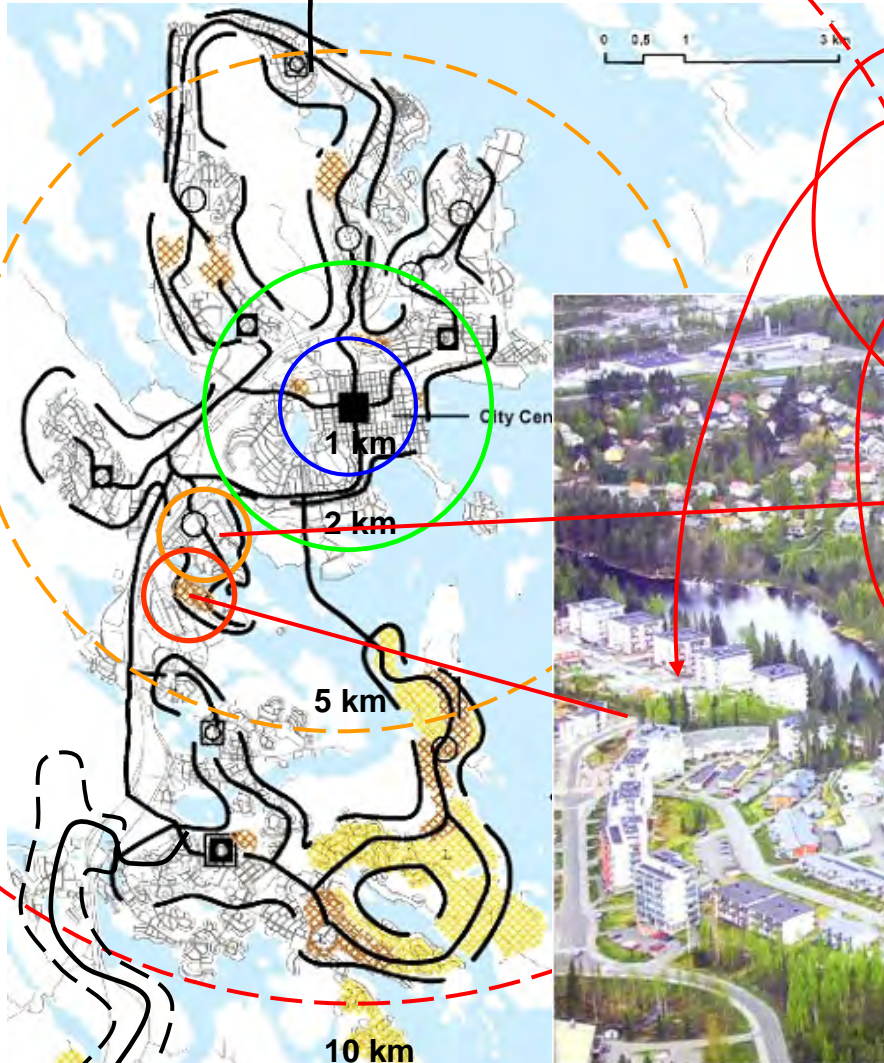
The fingers balance the growth and development of the Car City Fabric (yellow colour).

Kuopio Model Finland

A Finger of the Transit City Fabric

A small neighbourhood of 2500 inh was renovated and a supplementary bus oriented area of 1300 inh was built.

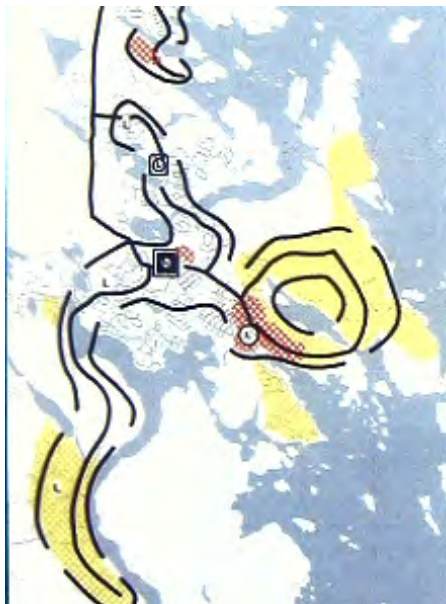
A bus street combines the areas.



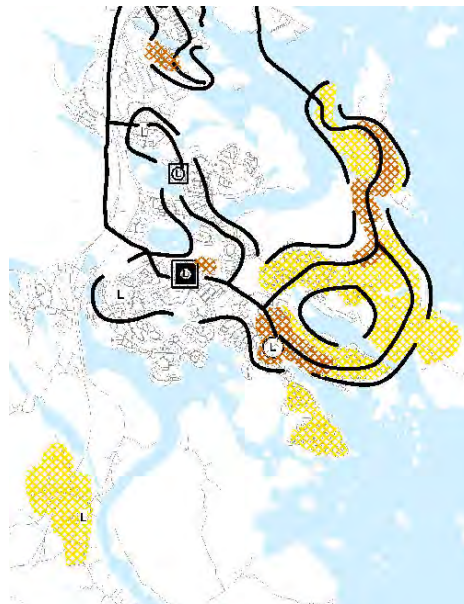
Some local services



VE 0+ / Autokaupunki



VE 1 /Joukkoliikennekaupunki



YVA

yhdyskuntatalous

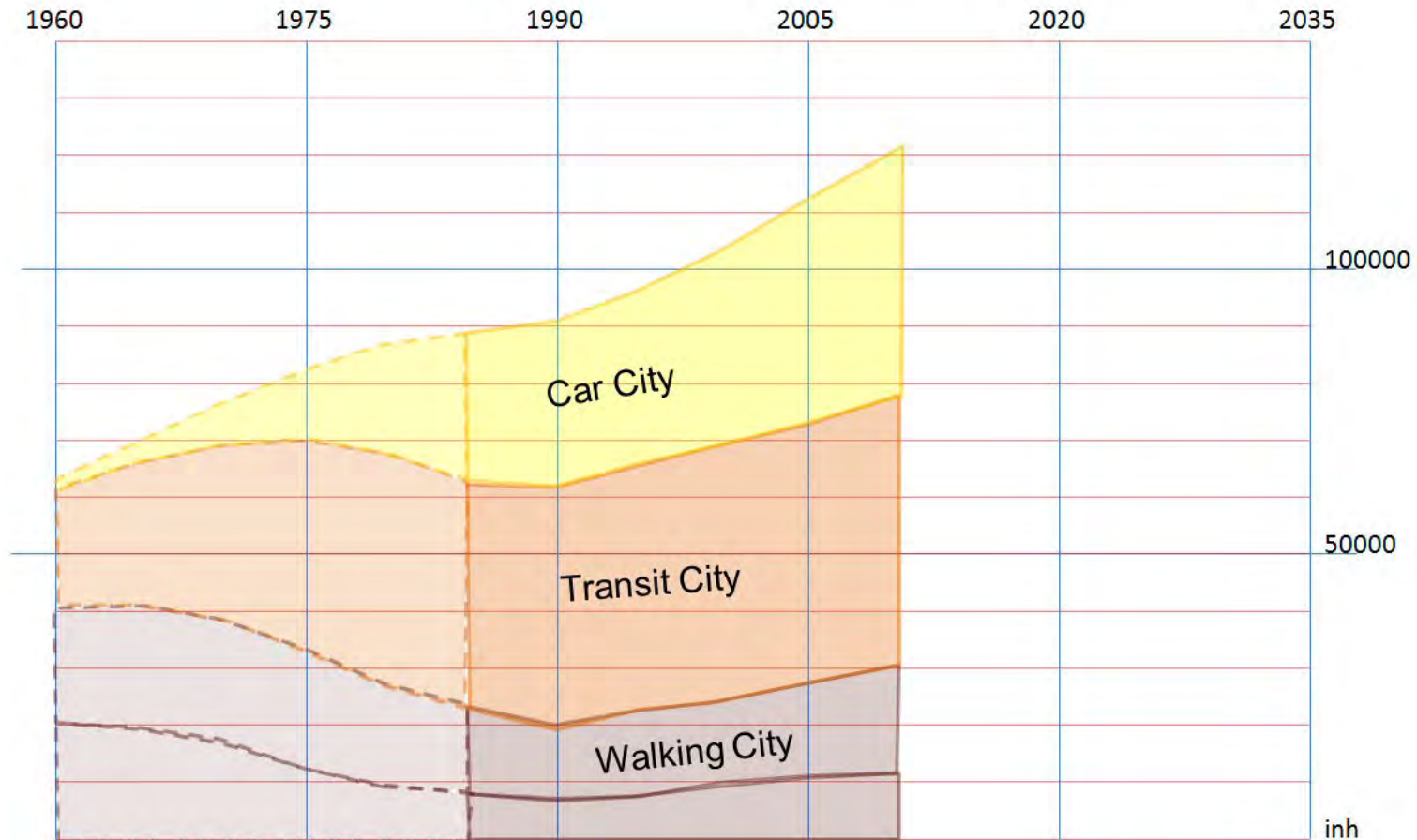
Saaristokatu

Saaristokatu ja kanava mahdollistavat suuret säästöt ilmastopäästöissä ja liikkumiskustannuksissa.

Saaristokadun YVA osoitti, että säästö uuden asutuksen liikenteessä on 50% (vuonna 2020).

History of the Fabrics 1960-2010

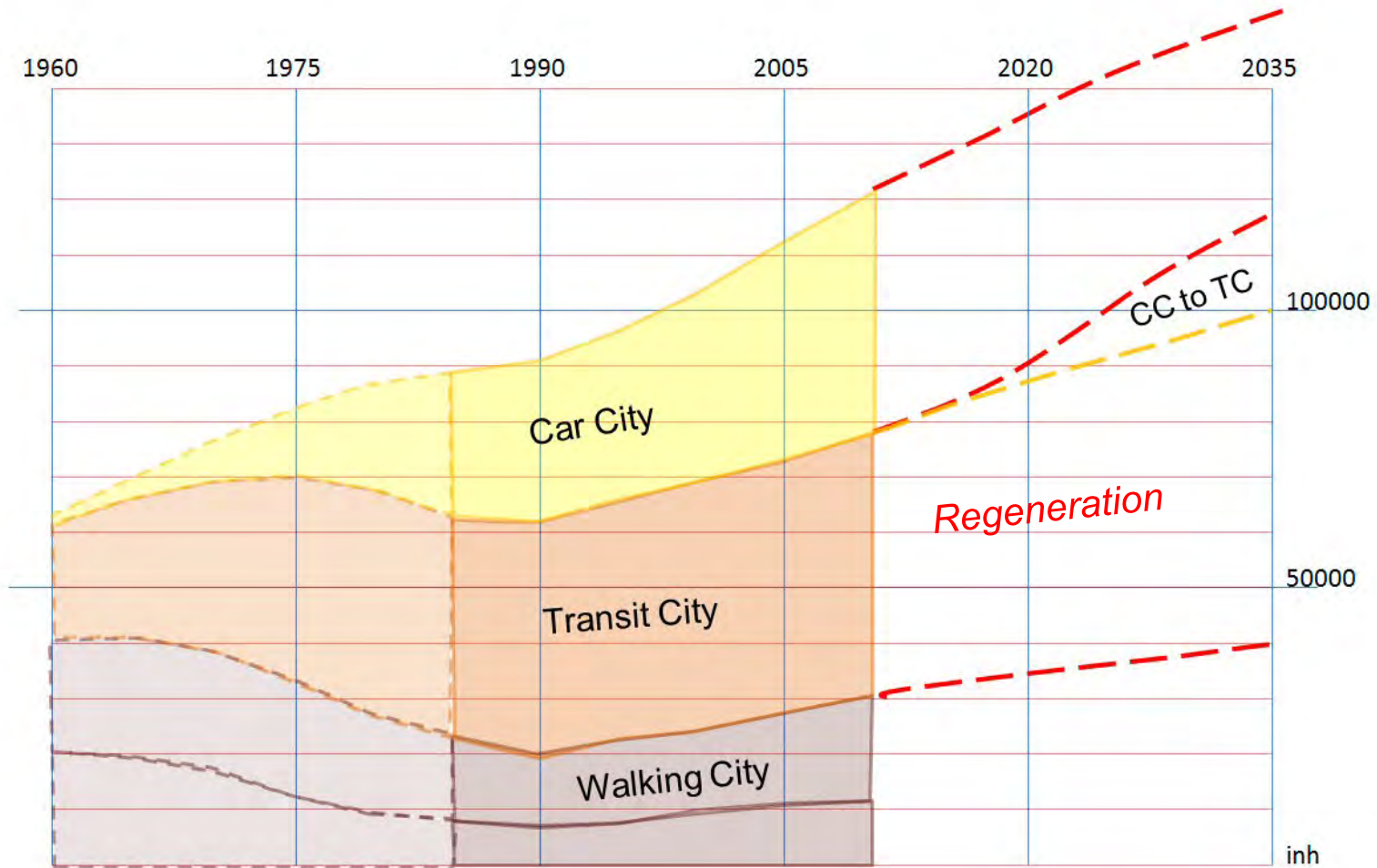
*The Fabrics of the Finnish Cities
have faced periods of **growth and
decline***



**Population by Areas of Urban Fabrics
An Intermediate City, Finland (Radius 8 km)**

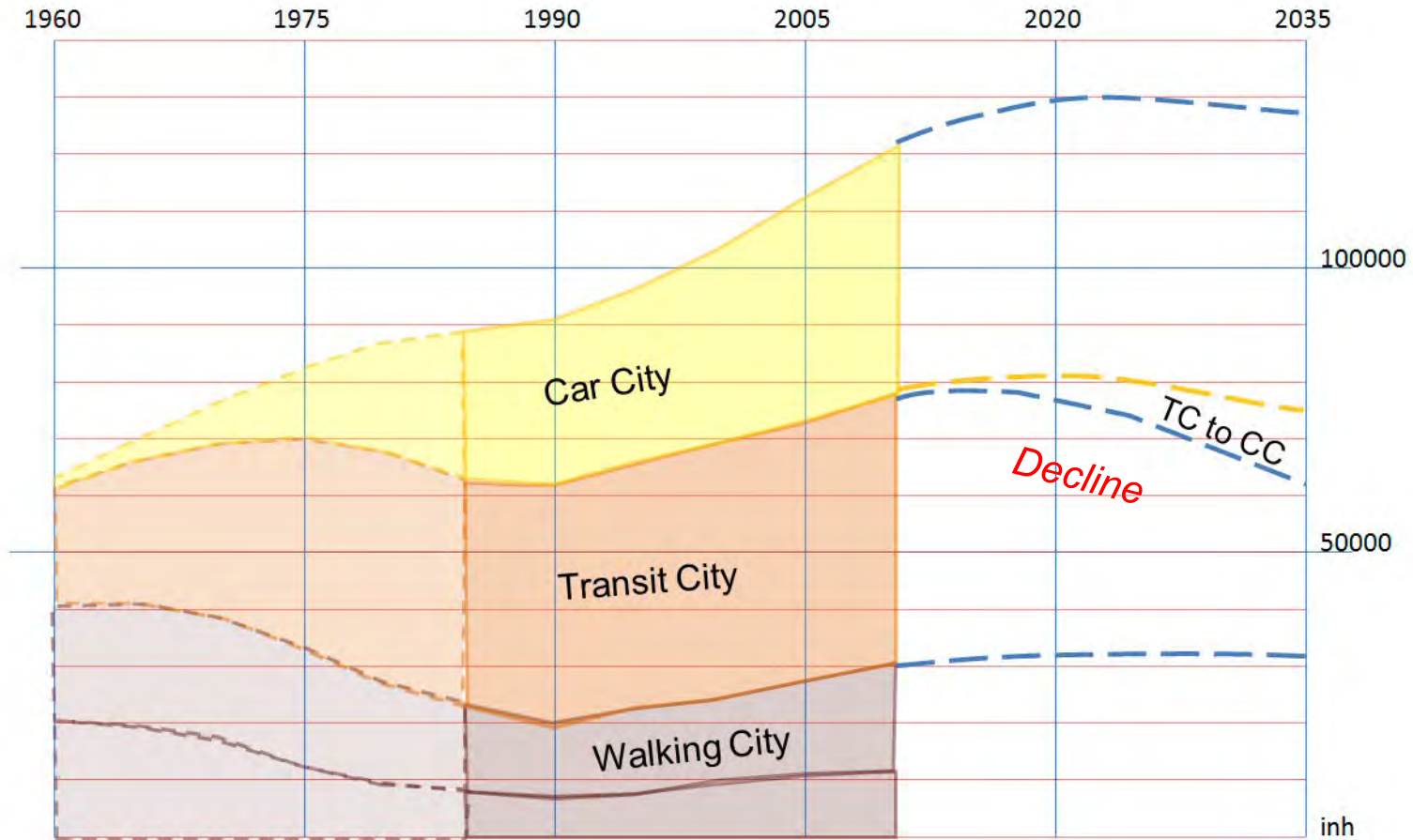
Scenario A 2010-2035

Growth of the **Transit City Fabric** leads to **growth**



Population by Areas of Urban Fabrics
An Intermediate City, Finland (Radius 8 km)

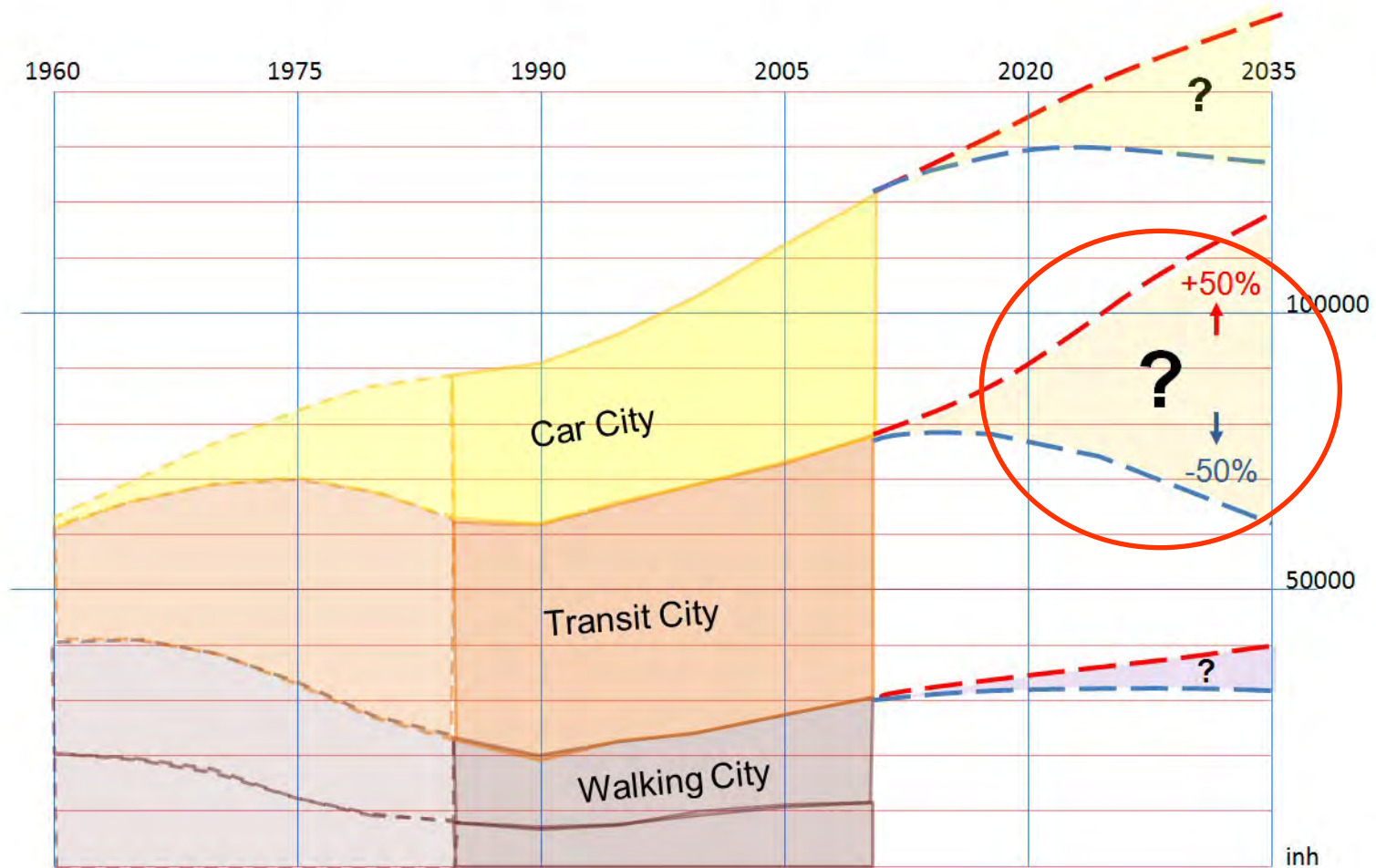
Decline of the **Transit City Fabric** leads to **decline**



Population by Areas of Urban Fabrics
An Intermediate City, Finland (Radius 8 km)

Potentials and Challenges 2010-2035

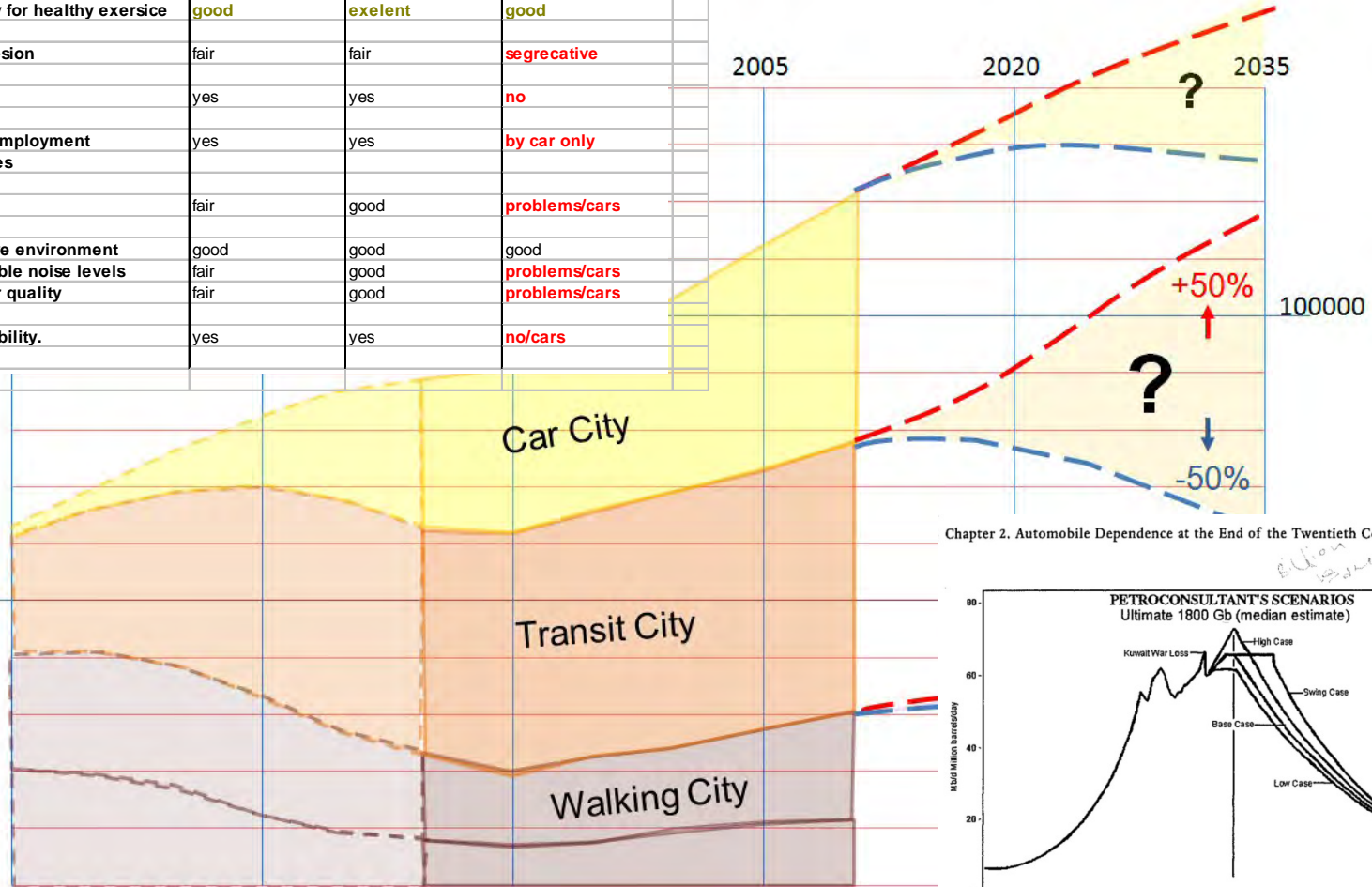
*The Transit City Fabric is the
key factor of the change*



**Population by Areas of Urban Fabrics
An Intermediate City, Finland (Radius 8 km)**

Kuopio			
Healthy objectives			
28.8.2006 / Leo Kosonen			
	Inner City / Walking City	Urban fingers / Transit City	Urban sprawl / Car City
• opportunity for healthy exercise	good	exelent	good
• social cohesion	fair	fair	segrecativ
• equity	yes	yes	no
• access to employment and facilities	yes	yes	by car only
• road safety	fair	good	problems/cars
• an attractive environment	good	good	good
• acceptable noise levels	fair	good	problems/cars
• good air quality	fair	good	problems/cars
• climate stability.	yes	yes	no/cars

Challenges are addressing sustainability and recilience of each of the Fabrics



Chapter 2. Automobile Dependence at the End of the Twentieth Century

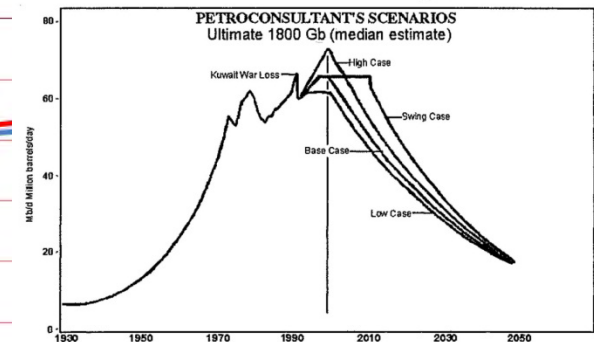
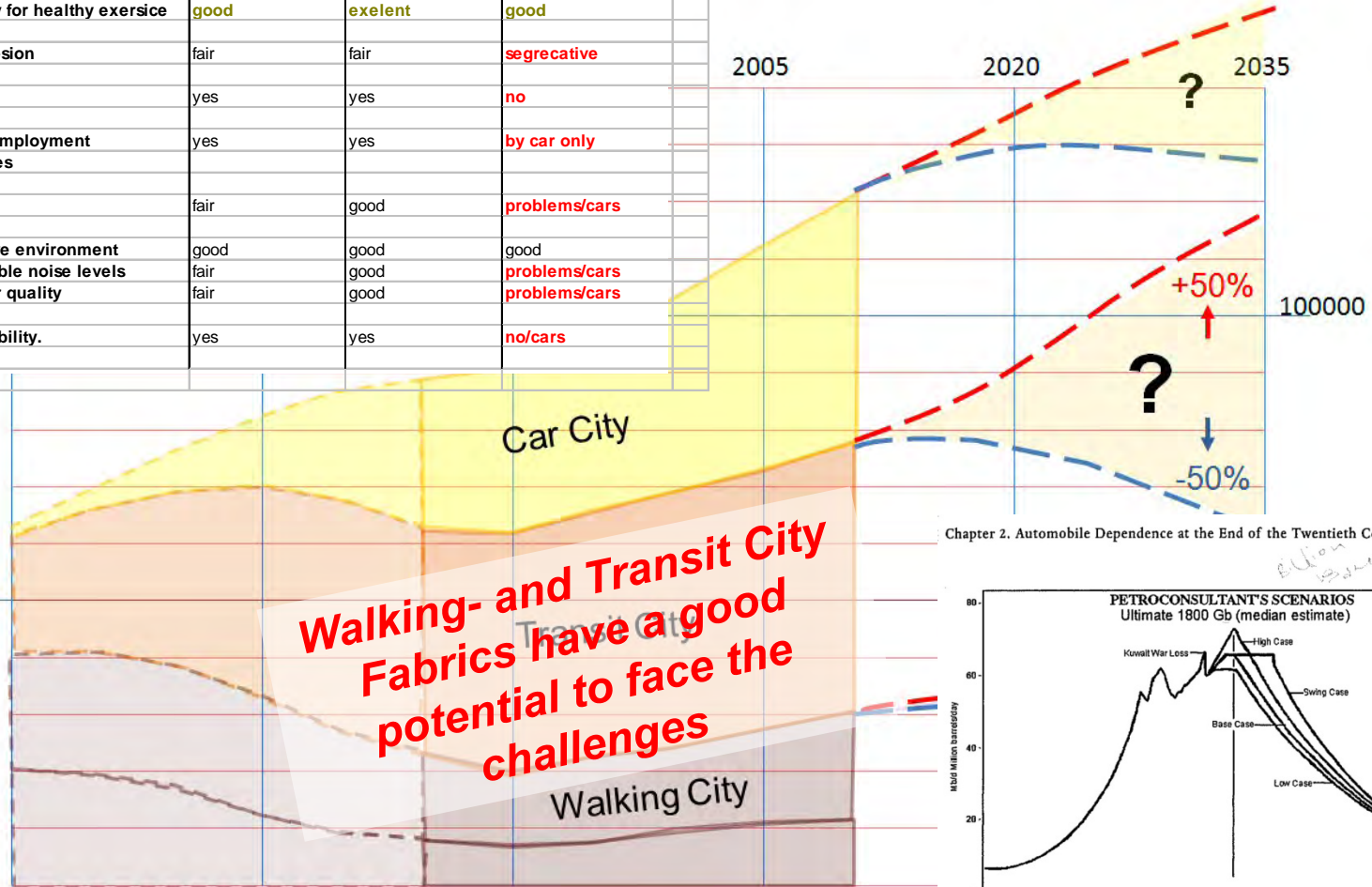


Figure 2.6. World oil production, 1930–2050. Source: Campbell and Laherrère (1995). Notes: Base Case: anticipated path; High Case: strong economic growth path; Swing Case: swing oil producers in Middle East decide to rationalize oil production; Low Case: weak economic growth path (some expensive oil is never developed).

Population by Areas of Urban Fabrics An Intermediate City, Finland (Radius 8 km)

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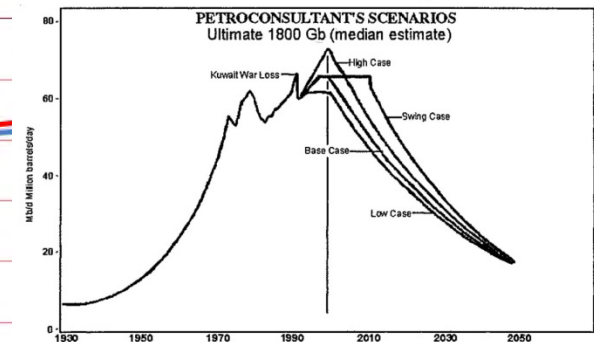
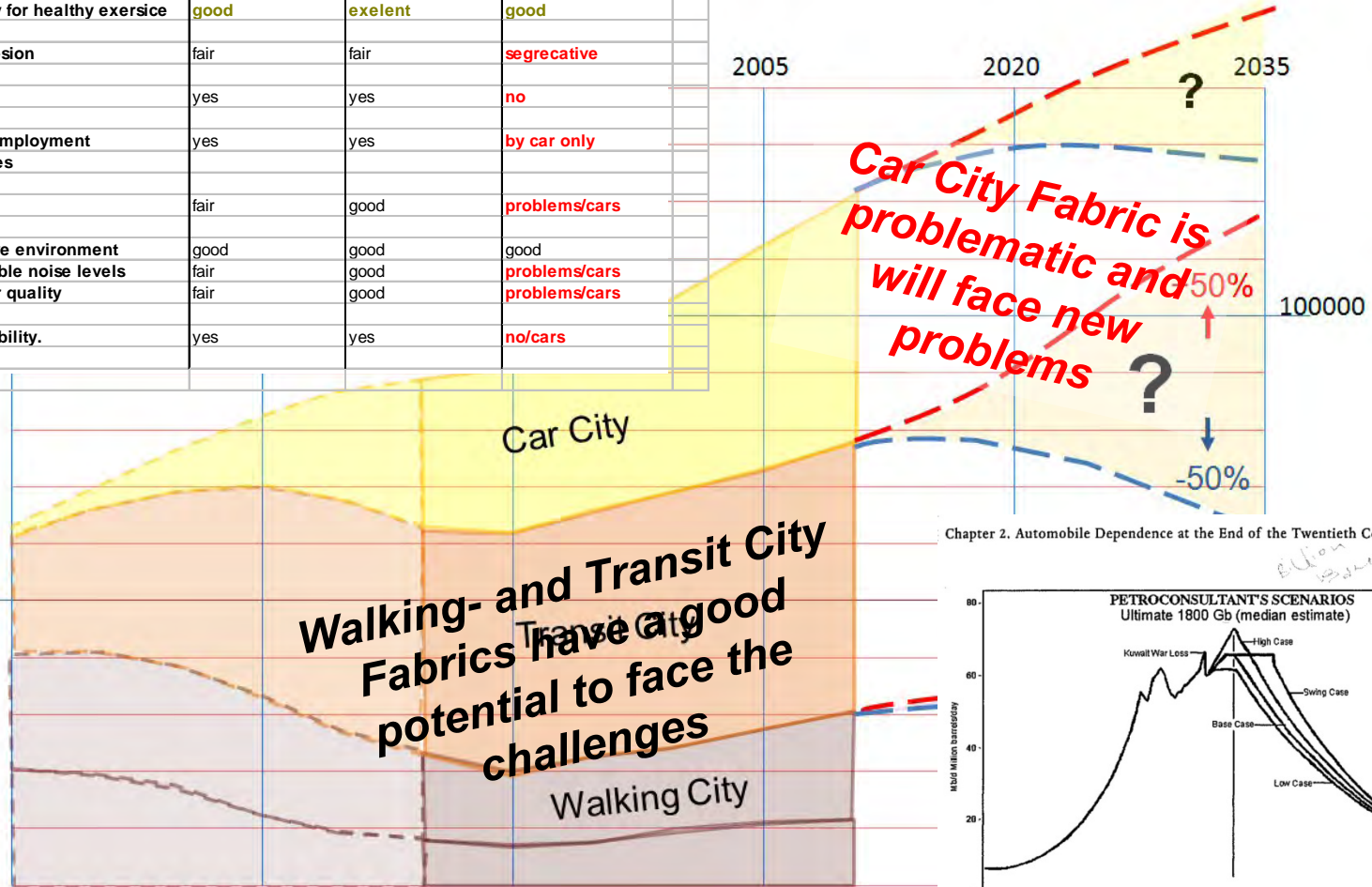


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An Intermediate City, Finland (Radius 8 km)**

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PELIKENTTÄ JA KAUPPA



KELLONIEMI - LÄHIÖ ELÄÄ !

ARKKITYYPIT
SAARA REPO, arkkitehti SAFA 8.2.2010
Kirkkokatu 19A23-21, 71100 Kuusjoensuu, Puh: 09-8511355, Fax: 0353291, arkki@saara-repo.fi

<http://www.urbanfabrics.fi/>

***Kolme kaupunkijärjestelmää
ajattelu - malli - teoria***

löydöksiä

***kaupunkijärjestelmät – Urban Fabrics (LK PN)
kaupunkikehityksen aallot
sisempi ja ulompi joukkoliikennekaupunki
kaupunkijärjestelmien ulottuvuudet: 2km, 8km, 20km (tai 25km)
elintavat - fyysinen rakenne
toiminnot - puitteet
alueet, elementit, ominaisuudet
Autokaupungistumisen lakipiste on ohitettu (PN)
tunnistaminen – arvostaminen – kehittäminen (PN)
”uusi hyvä kaupunki ”: ajattelutapa – ei kokonaisteoriaa
ajattelutapa – malli – teoria
todellisuusmallit – tulevaisuusmallit - erityismallit
kaupunkijärjestelmien sekoitukset***