Districts under redevelopment

Ensuring the highest level of accessibility in new neighbourhoods implanted in densely populated urban areas

Ecomm 2010

Context

In Geneva :

The urbanisation process happens primarily in urbanisation areas inside the city or immediately next to it

→ Circulation axes are generally overcrowded

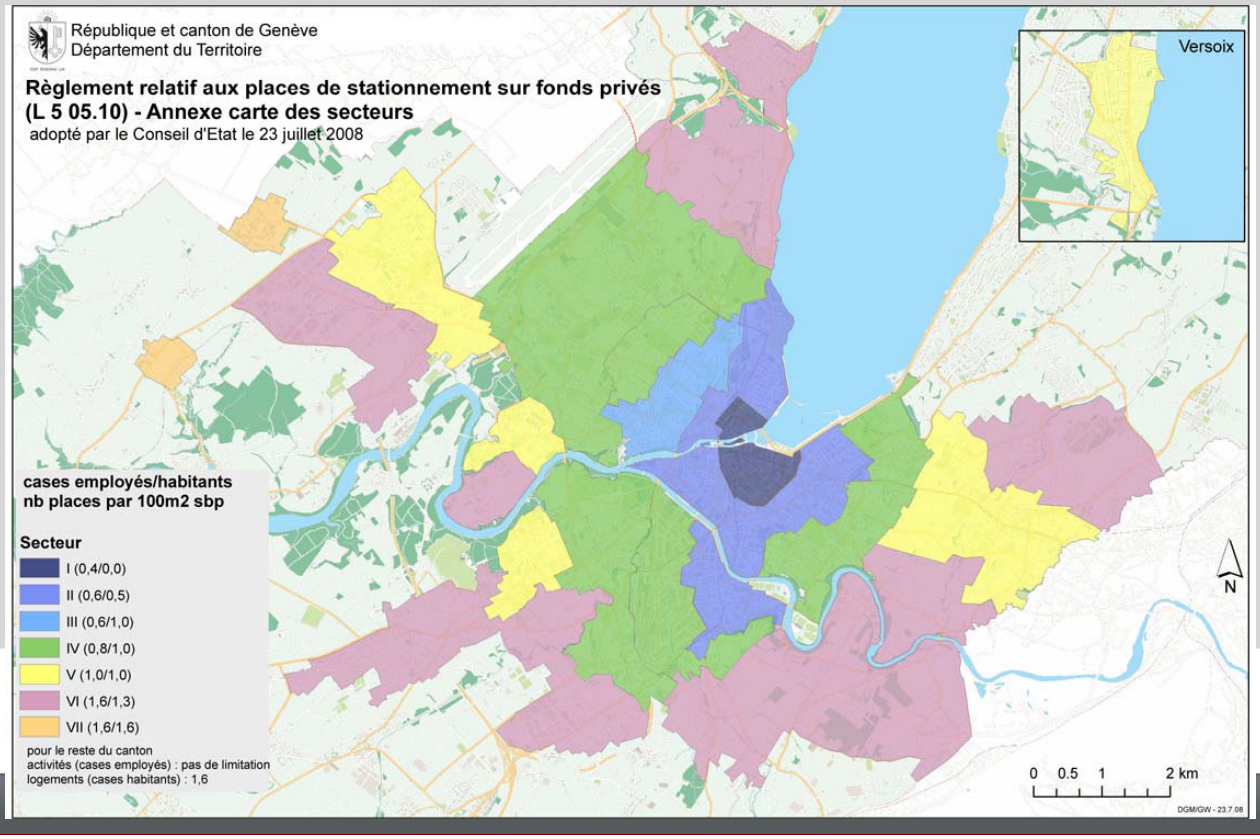
The general assumption is that home parking spaces must be created in order to avoid residents having to move their cars during the day

→Rules governing the minimal number of parking spaces needed per housing unit (or per ground floor area)

There are a few accompaniment measures that enable to revise downwards the number of required parking spaces

→ Avoiding a situation where the residents occupy public spaces with their vehicles.

Parking Requirements in Geneva



Objectives

Carrying out mobility studies in order to…

- Establish the guiding principles that will ensure optimal accessibility in the neighbourhood
- Determining the parking requirements and the possible derogation clauses that may apply to applicable parking rules
- Accompaniment of decisions that are sustainable in terms of city planning

MOBILITY MANAGEMENT mobilidee

Methodology

Elements taken into account in mobility studies for new urban neighbourhoods

- Suitability of work – housing diversity
- Neighbourhood accessible through public transport networks
- Neighbourhood accessible through soft mobility networks
- Saturation of the surrounding circulation axes
- Number of parking spaces envisaged in the project
- Proximity of shops, service (schools and nurseries) infrastructures and leisure facilities

Methodology

Geomatics analysis

Study pertaining to accessibility through public transport
Study pertaining to accessibility through soft mobility transport modes (walking and cycling)

→Enables a general overview of the situation in terms of accessibility

Time necessary to access the main service pools :

- Sports and leisure facilities
- Schools
- Shopping centres and areas

→Completes the analysis of the situation

Case study n°1 : project data

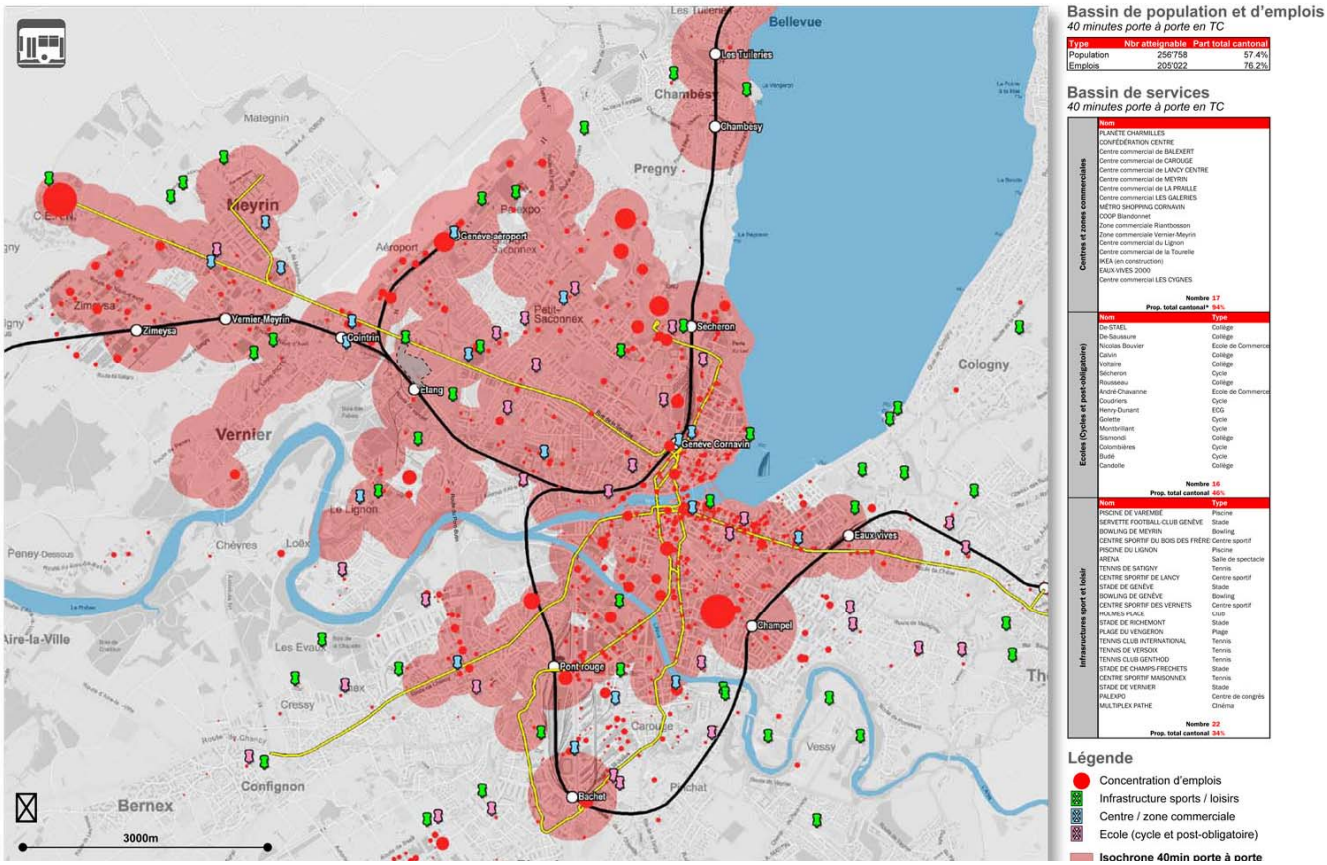
Geneva – project data

1000 housing units
4000 jobs
Public facilities (nursery, school)
A hotel
A shopping mall
Energy efficiency “as close as possible to zero emissions”

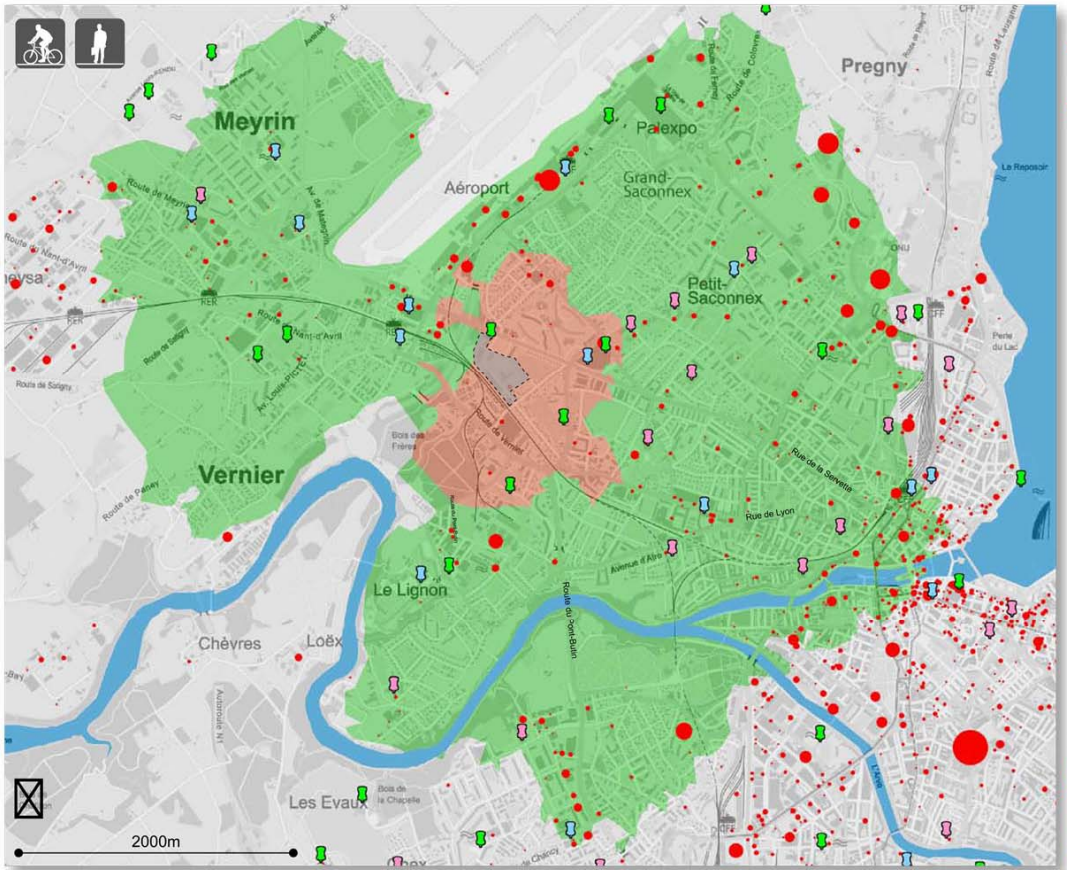
→ Mobility study upstream of planning permissions in order to anticipate possible opposition to the project

MOBILITY MANAGEMENT | mobilidee

Case study n°1 : analysis of infrastructures



Case study n° 1 : analysis of infrastructures



Bassin de population et d'emplois

15 minutes en MD (marche)

Type	Nbr atteignable	Part total cantonal
Population	12'613	2.8%
Emplois	6'138	2.3%

15 minutes en MD (vélo)

Type	Nbr atteignable	Part total cantonal
Population	148'319	33.2%
Emplois	85'930	31.9%

Bassin de services

15 minutes en MD

	Nom	Type
Centres et zones commerciales	PLANETE CHARMILLES	
	Centre commercial de BALEXERT	
	Centre commercial de LANCY CENTRE	
	Centre commercial de MEYRIN	
	Centre commercial LES GALERIES	
	MÉTRO SHOPPING CORNAVIN	
	COOP Blandonnet	
	Zone commerciale Riantbosson	
	Zone commerciale Vernier-Meyrin	
	Centre commercial du Lignon	
	Centre commercial La Tourelle	
	IKEA (en construction)	
	Nombre	13
	Prop. total cantonal*	63%
Ecoles (Cycles et post-obligatoire)	Nicolas Bouvier	Ecole de Commerce
	Voltaire	Collège
	Rousseau	Collège
	André-Chavanne	Ecole de Commerce
	Coutances	Cycle
	Henry-Dunant	ECG
	Golette	Cycle
	Renard	Cycle
	Cayla	Cycle
	Montbrillant	Cycle
	Grandes-Communes	Cycle
	Budé	Cycle
	Nombre	12
	Prop. total cantonal	34%
Infrastructures sport et loisir	PISCINE DE VAREMBÉ	Piscine
	SERVETTE FOOTBALL-CLUB GENÈVE	Stade
	BOWLING DE MEYRIN	Bowling
	TENNIS CLUB VERNIER	Tennis
	CENTRE SPORTIF DU BOIS DES FRÈRE	Centre sportif
	PISCINE DU LIGNON	Piscine
	ARENA	Salle de spectacle
	STADE DE VERNIER	Stade
	PALEXPO	Centre de congrès
	MULTIPLEX PATHE	Cinéma
	Nombre	10
	Prop. total cantonal	15%

Légende

- Concentration d'emplois
- Infrastructure sports / loisirs
- Centre / zone commerciale
- Ecole (cycle et post-obligatoire)
- Isochrone 15min marche à pied
- Isochrone 15min vélo

Case study n°1 : suggested improvements

Facilities
- Secure and covered bicycle sheds
- Bicycle sharing systems (such a system is yet to be created in Geneva)
- Improving the neighbourhood's accessibility to the bicycle network

Services
- From home delivery of groceries by bicycle to electric assistance
- Sustainable mobility subsidy included in the rent
- Separation of the parking space and the lease
- Mobility charter with companies

Communication
- Accessibility
- Participative process including companies and residents
- Neighbourhood marketing (neighbourhood with low levels of motorisation)

→Following the mobility study, the owner included mobilidée in the list of agents involved in the start of construction works.

MOBILITY MANAGEMENT | mobilidee

Case study n°2 : project data

Geneva – project data

Mixed Neighbourhoods with jobs and habitations located between two communes

One of the communes wants to build an eco-neighbourhood

Geneva state opposes the reduction of the number of parking spaces stated in the cantonal regulations

→ Mobility study in order to analyse the various hypotheses aimed at reducing the number of parking spaces based on accessibility.

Case study n°2 : project data

Hypothesis A: number of parking spaces set forth in the parking regulations: 1.3 spaces/100m² of ground floor area

Hypothesis B: 20% reduction of spaces in 25% of public utility housing units

Hypothesis C: ratio of 1 space/100m² of ground floor area

Hypothesis D: ratio of 0.5 space/100m² of ground floor area (usual ratio for an eco-neighbourhood)

Derogatory clauses

The parking regulations in Geneva state include derogatory clauses that are based on:

a) requirements due to environmental considerations […]

→ Impact study report: limit values of NO^2 are exceeded

b) commitments and specific agreements […] that enable to objectively justify the reduction of the number of parking spaces.

→ Agreement relating to accompaniment measures

c) notable improvements in terms of availability of public transport

→ Geneva's new RER network will pass directly nearby

Case study n°2 – results

•The neighbourhood benefits from good accessibility through sustainable mobility
70% of the state's jobs are accessible in 40 minutes
25% of the state's jobs are accessible in 15 minutes by bicycle

• As these levels of accessibility are to be improved significantly (construction of Geneva's new RER network)

• As an agreement has been reached between property owners and the State

• As the construction of additional parking space is possible if the project fails

→ The State of Geneva has accepted to reduce the number of parking spaces to 1 space/100 m2 of gross floor area (hypothesis C)

Thank you for your time!

MOBILITY MANAGEMENT | mobilidee