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The views of high-skilled employees, managers and transnational migrants

ACRE report 8.11

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ACRE is an acronym of the international research project 'Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union'.

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This report presents the synthesis of three empirical studies conducted in Toulouse between June 2007 and February 2009 within the ACRE programme. This research aims at understanding the motivations of highly skilled people in the creative and knowledge sectors to move in a city and to settle at a certain location inside this city. We try in particular to evaluate the weight of two types of location factors: the classical "hard factors" on the one hand, such as business opportunities, accessibility, availability of dwellings, infrastructures and tax incentives; and the so-called "soft factors" on the other hand, related to more immaterial conditions such as the atmosphere of the place, the tolerance of people living there, or the cultural diversity present in the region. This study is in line with current theories on urban competitiveness, focusing on the importance of individual choices and the changing working conditions in a context of a global and increasingly dematerialised economy.

Three target groups have been surveyed and different methods have been used to address these questions. First, 150 employees and 50 former graduates in 6 creative and knowledge sectors (audiovisual, advertising, software, bank, consultancy, research and education) have answered a questionnaire built to understand their satisfaction towards their working conditions, the city and the neighbourhood they live in. This quantitative approach has allowed us to collect information about their personal trajectory, and to find out that nearly half of them were born in Midi-Pyrénées or adjacent regions, and that the same proportion (among the 150 employees) had studied in the metropolitan area of Toulouse. This result enabled highlighting the precise weight of soft factors regarding the issue of the city's attractiveness for people coming from outside the region, ie. having no anterior link with it. Our conclusion is that **hard factors, especially employment, still actually play a major role in the decision of people to move and settle in the city**, and that **soft factors weigh only marginally**. Indeed, only less than 10 per cent of the 'non-locals' ranked the climate or the overall friendliness of the city as an utmost reason to be to Toulouse.

The **importance of the personal trajectory and hard factors** in the decision to locate somewhere has been confirmed with the second target group of managers in three creative and knowledge sectors (consultancy, audiovisual and software). Only 5 out of the 20 interviewed managers were born and had studied outside Toulouse. These 'external' persons put forward reasons related to their spouse's employment or mainly to business opportunities offered by the regional metropolis. Though often present in the discourses, the advantages of the southern city's climate or its overall friendliness never constitute an overriding reason for managers to settle their business in Toulouse. This study then allowed us to **confirm that soft factors might be important, not to attract, but to retain people in a city**. Also, it seems that these types of reason (atmosphere, appearance…) appear more clearly decisive regarding the location of the company inside the UAT. Creative companies (video, animation movie, 3D web design, computer games) seem to favour the historic core. Managers put forward

accessibility and flexible working hours, but the choice of a central neighbourhood also relates to the image given to the clients of the sector.

These results have been put into relation with the economic profile of Toulouse. Due to its specialisation in aeronautics, space and electronics, **the city is characterised by a high proportion of knowledge intensive activities. Cultural and emergent creative industries that are studied within the ACRE programme are not representative of the local economic fabric**. Interviewees in the creative sectors point out that their activities do not enjoy the same recognition and support from local governments as the knowledge sectors. They also particularly deplore a too strong domination of Paris, which concentrates most of the labour force and business opportunities in the creative and cultural fields.

The third empirical study dealt with the situation of transnational highly-qualified migrants who chose to live and work in Toulouse. As for the managers' target group, qualitative semi-structured interviews have been conducted among 21 knowledge and 8 creative workers. Results give **higher education and studies as a major first motivation and mean to come and establish in Toulouse in the first years**. Then a **clear distinction can be drawn out between the knowledge and creative workers**. Whereas the first ones rank systematically studies or jobs as a prior reason to migrate, the second sub-group puts the existence of social relations forward, placing studies as equivalent or less important reason to move to the city. The motivations to stay in the city, which most of the time rely on a combination of factors, are also different. Whereas knowledge workers rank often employment as an important reason not to leave the city, creative workers seem more dissatisfied towards their job's situation in Toulouse. This might even be a reason to leave the city but these workers have also developed personal relationships (married or stable couple) that make them stay longer. We also notice that soft factors are generally cited more often as a reason to stay than as a reason to come. Creative workers do not cite them as much as the knowledge interviewees.

Drawing from these three empirical studies, we have been able to identify the **strong and weak points of the city region** regarding the different target groups and the different location factors. Thus, as far as *hard factors* are concerned, **job** is clearly the main driver in the decision of employees to live in Toulouse. **The size of the city** is the main attraction factor for the managers, whereas **studies opportunities** are overwhelming in the decision of migrants to move to the city. Considering the *soft factors*, creative employees assess the **proximity to natural environment and the open minded and tolerant atmosphere of the city** as an important attraction or retention factor. Knowledge workers are more likely to cite the **weather** as a reason to be or to stay in Toulouse. The **overall friendliness of the city** is seen as an advantage of the city by the graduates, the creative and knowledge managers, who also cite the weather as a positive aspect of Toulouse. On the other hand, several fields of the urban organisation are criticised by the different target groups. **Weaknesses** pointed out by the managers relate to the **connection with other cities in France** and the **taxation system**. Job offers and career opportunities, **cultural milieu** and **quality of the architecture** are not satisfying for employees in the creative sectors. Creative transnational migrants also consider the cultural milieu as weak. Furthermore, the **image of the city and the professional sphere** (contacts, working staff) do not match their expectations. For most of the employees, strong improvements should to be done regarding the **transports within the city**.

1.1 Objectives

This report presents a synthesis of three empirical studies conducted in Toulouse between June 2007 and February 2009 within the ACRE programme. This international research project running from 2006 to 2010 aims at understanding the drivers behind the decisions of highly skilled people in creative and knowledge industries to find a job and live in a city. A second and interrelated objective is to explore the role that both hard and soft factors play in their decision to live in a particular location in the region.

We will compare the different spatial orientations of the target groups we distinguished and the differences between them in terms of the relative weight they give to the various factors that are regarded to be relevant to them. The integration has to result in an understanding of the strong and weak points of the region regarding their capacity to accommodate creative knowledge.

1.2 Short description of previous work and basis of the report (WP5, WP6, WP7)

The **work package 5** (WP5-11) aimed at understanding the drivers behind the decisions of **workers and higher educated graduates** in creative and knowledge intensive industries to find a job at a specific location in Toulouse and a place of residence, with a particular focus on estimating the relative importance of 'soft' location factors (quality of space; atmosphere of the city and region, etc.) in their decision making process.

A survey of 200 questionnaires was performed, specifically aimed at the following partly overlapping population categories:

- employees in 'creative industries': 75 respondents;
- employees in knowledge-intensive companies: 75 respondents;
- university / polytech graduates: 25 respondents;
- art / media school graduates: 25 respondents;

The questions asked were about the extent to which these population categories were satisfied with their living and working environment; the reasons for moving to their current region of residence; the extent to which their expectations of living and working in this region (based on the regional image to the outside world) had been justified; how long they were planning to stay in the region; and, when planning to move, the main reasons for this decision. The

following NACE sectors were targeted: Film and Music, Radio and TV (921 & 922); Computer games, webdesign & electronic publishing (722); Advertising (744); Business and management consultancy (741); Finance (65); Higher Education and Research (803 & 73).

The aim of the **work package 6** (WP6-11) was to understand the drivers behind the location decisions of **owners of firms and entrepreneurs** in creative and knowledge-intensive industries to set up their business in Toulouse. The aim was to estimate the relative importance of the location factors that played a role in the managers' decision making process ('classic' factors, such as the presence of adequate and specialised labour, accessibility, tax incentives, and also 'soft' factors, such as the quality of space; atmosphere of the city and region, available high-quality residential space, etc.). Questions covered in the interview related to several aspects of the manager's and the company's life: including their biography, and various aspects of the company's activity (turnover, products, recruitment), with a specific focus on networks (clients, sub-contracting companies). Special attention was also paid to the image of the city for the sector and to the perceived role of public policies. One final question concerned managers' personal opinion on what stimulates or impedes creativity.

The WP6 report brought together the results of qualitative semi-structured interviews of 20 managers in the following sub-sectors of the creative knowledge economy: Computer games and Digital media/Web design (NACE 72.2); Motion pictures & Video activities; Radio& TV activities (NACE 92.1 and 92.2); Business and Management Consultancy Activities (NACE 74.14).

The overall aim of **work package 7** (WP7-11) was to understand the drivers behind the decisions of **highly skilled transnational migrants** to settle and work in the Toulouse region. What kind of skilled migrants can be found in the Toulouse region? How successful is the city in attracting highly skilled transnational migrants? Why do they come to Toulouse? Where do they live and work? How satisfied are they with their life here?

Following from the previous work package (WP6), this study used a qualitative research method. The sample was composed of 29 interviewees broken down as follows:

- 21 persons having an occupation in a knowledge-intensive sector (aeronautics, health, ICT, research, education, consulting)
- 8 people with creative occupations (design, audiovisual, music).

2   RESEARCH DESIGN AND METHODOLOGY

2.1   Methodological background

As this report provides a synthesis of three studies on different target groups involved in the creative knowledge industries in the Urban Area of Toulouse (WP5: employees and graduates; WP6: managers; WP7: transnational migrants), it is useful to recall the methodological background of these previous works, before presenting the methodology of the current work package and the difficulties encountered.

2.1.1   Methodological background of the previous works

The first study focused on employees and graduates of the creative and the knowledge industries. The aim was to understand the main reasons and driving forces that led them to have a job and to locate in the Urban Area of Toulouse. It was also to analyse the role that hard and soft factors played in their decision to live there. A questionnaire for standardised interviews has been developed by the Dublin team and was divided into 4 categories:

- ❖ Satisfaction with the city: One of the key arguments in the debate on knowledge and creative cities is that the so called 'soft factors' are increasingly important in the location decisions of both firms/organisations and individual workers. In particular, it is argued that workers in the creative sector place a high value on the 'soft factors', by which is meant for example the atmosphere of a city, the variety of attractions and interests that are to be found there. The idea behind the creation of this section of the questionnaire was to know more about the satisfaction of workers and graduates with different aspects of the city. In developing this section, it was intended to achieve an overall evaluation of the city.
- ❖ Satisfaction with job and work environment: In the knowledge economy, and particularly in the creative economy, there is a suggestion that the work is more flexible, creative and interesting than other types of jobs. This led to address the satisfaction with the job and the work environment in general.
- ❖ Satisfaction with neighbourhood/area and dwelling: Although someone can be generally satisfied with the city in which he/she lives, this satisfaction is not necessarily transposed into other spheres of his/her life. Given that neighbourhood in which people live is a central element to people's satisfaction, it was also relevant to address the issue of the neighbourhood and, more concretely, the dwelling satisfaction.
- ❖ Background data: Background information (date and place of birth and studies, gender, income etc.) is essential in any questionnaire, as it provides a basis for the analysis.

The survey was scheduled between the 1st of July and the 31st of August 2007. The main technique used was a combination of self-completion questionnaire and face-to-face interview except for a number of questionnaires that were emailed to the employees at the end of the survey period and sent back electronically due to time constraints. Some interviewees also insisted on getting and sending back the questionnaire through Internet.

All the answers were coded and collected into a statistics software SPSS. Most of the results have been obtained by crossing different tables. Some data have been gathered and recoded in order to obtain more significant results in correlation tests.

The second study (WP6) presents results of a survey with managers and freelancers working independently in creative and knowledge industries. The objective was to understand which factors influenced their location decisions to settle a creative or knowledge firm in the UAT. The survey was made through qualitative research methodology. Based on the provided interview guidelines made by the Munich and Milan teams, the interview guidelines covered several themes, such as the origin of the firm and its activities, the business models and markets, the labour process and recruitment, the networks of the firm, the most relevant location factors (soft and hard), the supports and prospects.

The interviews were conducted during three months from February to April 2008. There were semi-structured interviews of 20 managers of selected knowledge intensive and cultural industries and 6 representatives of business organisations or administrations. The interviews were all transcribed (about 30 hours of interviews).

The WP 7 study presents the results from an empirical research on transnational migrants in creative and knowledge-intensive industries and on their motivations to choose Toulouse as a city to work and live.

The selection and the topic guide for interviews with highly skilled migrants have been discussed in Riga among the ACRE teams in June 2008. In July, two interviews (one expert and one migrant) have been conducted as pre-tests before implementing the whole research process from September to November 2008.

The interview guideline is structured in order to evaluate the weight of different types of factors in the location decision of these people. We have been able to get the whole raw transcribed material (25 hours recorded on the whole). However the transcription process of interviews achieved with non fluently French speaking people has proved difficult and time consuming.

At this stage we decided to test the possibilities of a text analysis software (Atlas Ti) which has been useful to think about the coding process and the mining of information in a document. First tests have enabled to make some observations and propositions for a relevant and efficient coding process, considering the questions addressed within the ACRE programme.

Table 2.1 - Synthesis of the methodological process used for the ACRE Survey

Work package	Groups concerned	Methods	Type of data	Type of analyses
WP5-11	Employees (150) and graduates (50) of the creative and the knowledge industries	Questionnaires with a combination of self-completion and face-to-face interviews (200)	Quantitative	Statistical analysis with SPSS Software
WP6-11	Managers (20) and representatives of business organisations or administrations (9) of the creative and the knowledge industries	Semi-structured and registered interviews (29)	Qualitative	Structural and thematic content analysis and manual statistical analysis
WP7-11	Transnational migrants of the creative (8) and the knowledge industries (21)	Semi-structured and registered interviews (29)	Qualitative	Structural and thematic content analysis with the help of a text analysis software (Atlas Ti), and manual statistical analysis

2.1.2   *Methodological background of current work*

As the current work (WP8-11) is a synthesis, it has to adopt a methodology that allows to integrate the different types of data and analyses used in the surveys (Table 2.1).

To identify the common findings and differences in the WP5-11, WP6-11 and WP7-11, a filtering process has been retained (Figure 2.1).

The first filter focuses on how the main hard and soft factors influence the decision making of the three target groups: employees, employers/managers, and transnational migrants (see Summary Matrix 1 in 3.4). The second filter identifies the strong and weak points of the Urban Area of Toulouse regarding different location factors and according to each sub-group surveyed (see Summary Matrix 2 in 4.2).

Figure 2.1 - Filtering process in the WP8
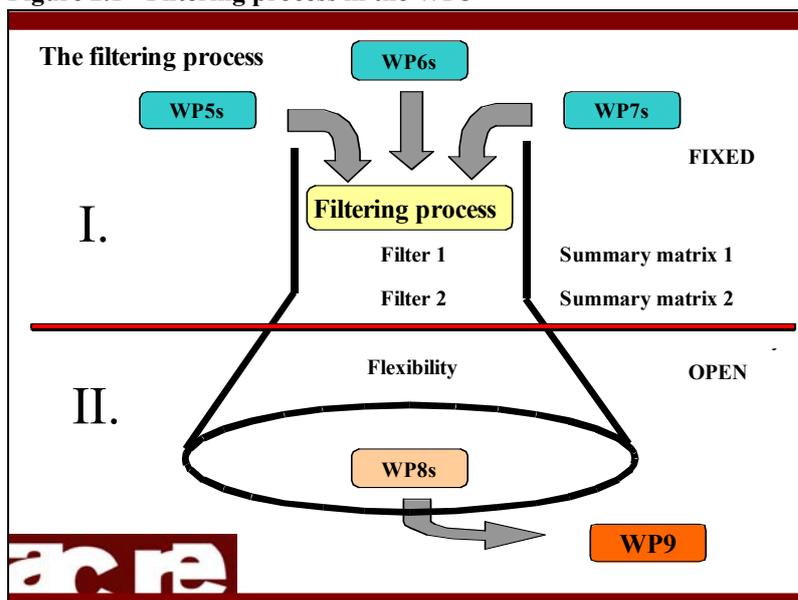
Source: The ACRE project

2.1.3 Methodological difficulties

The factors that we compared for evaluating the general satisfaction of the city are not of the same kind, some are measurable others are not, for example the friendly atmosphere of the city.

To make comparative studies between the 13 cities of the ACRE project, we selected the same branches of activities, namely:

- for the employees and graduates survey:
- finances; law and other business services; R&D and higher education (knowledge-intensive industries);
- advertising; video, film, music, photography, radio, television activities, and audiovisual media; computer games, software, and electronic publishing (creative industries);
- for the managers survey:
- business and management consultancy activities (knowledge-intensive industries);
- motion picture, video, radio, and television activities; computer games, web design, and electronic publishing;
- for the migrants survey, we kept the difference between creative and knowledge industries but no specific branch was selected, we could choose between all the precited sectors.

Two problems occurred from this process:

- the results of each survey lay on the specific sectors chosen and we don't know if a comparison is possible;
- some selected branches are not well represented in Toulouse agglomeration.

The motion picture, video, radio, and television activities are strongly dependent from Paris, it is the same in the advertising branch or the financial sector. Thus we wonder if the results are representative of the creative and knowledge sectors as a whole and if the results obtained on those sectors can be generalised on others branches.

We have met people belonging to firms that have remained in the UAT. If we have had the opportunity to interview people from firms that have left due to some dissatisfactions, we guess that the results could be slightly different.

2.2   Structure of the samples

2.2.1   General observations

The research design results from a collaborative work of all participating teams of the ACRE project. Methodology issues focused on the elaboration of a questionnaire and interview guidelines as well as on the definition of selection criteria to establish a common sampling process.

A preliminary study (ACRE-report WP4) described the importance and distribution of creative knowledge workers and graduates in the region of Toulouse (Peyroux et al. 2007). For the analysis, data from the French National Institute of Statistics (INSEE) and database of the Inter-Professional National Union for Employment in Manufacturing and Commerce (UNEDIC) were used.

Table 2.2 - Sampling process (WP5-11, WP6-11 and WP7-11) in Toulouse

Empirical studies	Target groups	Sectors		Number
Quantitative (questionnaire)	Employees	creative (75)	744 Advertising	24
			921-922 Audiovisual, Music	24
			722 Webdesign Computer games	27
		knowledge (75)	65 Banking	28
			73-803 Research Higher Education	23
			741 Consultancy	24
			Total Employees	**150**
Qualitative (semi-structured interviews)	Managers	creative (13)	921-922 Audiovisual, Music	7
			722 Webdesign Computer games	6
		knowledge (7)	741 Consultancy	7
			Total Managers	**20**
	Transnational Migrants	creative (8)	Audiovisual, Music, Theatre	4
			Other (design, fashion, press)	4
		knowledge (21)	Aeronautics, Space, Telecommunications, Electronics	11
			Environment, Health	5
			Higher education, Social sciences	5
			Total Migrants	**29**
			Total All target groups	**199**

Source: ACRE surveys

(WP5-11 and WP6-11) Once companies were identified according to the selection criteria, the location inside the city region had to be considered. The sample had to include people working in the core city, as well as in the fringe or the periphery of each metropolitan area. The size of the company was also taken into account and self-employed, as well as workers in small (1 to 5 employees), medium (6 to 49) and large firms (50 employees and more) were targeted according to the relative weight of different size categories within the local creative economy.

(WP5-11) The level of education of respondents was generally high. The ISCO classification was applied to characterise the level of occupation of the surveyed people. As far as it was possible, employees occupying higher or strategic functions in the company (managers, professionals, associate professionals) had to be selected to fill in the questionnaire. The questionnaire was designed to measure the satisfaction of creative people with the city, their working and living conditions, including housing aspects. In addition, personal characteristics of respondents such as gender, age, family status, place of birth and studies, were recorded.

2.2.2 *Characteristics of the sample of employees and graduates (WP5)*

Considering the whole sample (200 people), 70 per cent of the respondents are between 25 and 44 years old. The surveyed population is composed of 54 per cent of men and 46 per cent of women. Most of the respondents live inside the commune of Toulouse (56 per cent) or in the first ring (30 per cent), a smaller part living in the outskirts. Regarding this result, we must however keep in mind that **the selection has been done according to the workplace and not to the place of residence**. A majority of the sample (71 per cent) is composed of small households with one to three persons in the dwelling. Households with children (47 per cent of the sample) mostly live in the peripheral areas of the Urban Area of Toulouse.

If we exclude the 50 graduates who have been selected according to their high qualification level, almost **50 per cent of the interviewees have reached a master degree**.

Table 2.3 - The sample of graduates

		Number	**Per cent**
Knowledge:	Engineering	9	18.0
University - Polytechnic	Administration / Trade	10	20.0
	Social sciences	6	12.0
Creative:	Video Photo	8	16.0
Art - Media	Fashion/Art/Architecture	10	20.0
	Literature/Entertainment	7	14.0
	Total	50	100.0

Source: ACRE surveys

2.2.3   Characteristics of the sample of managers

Companies have been selected by considering three major criteria related to their activity, staff (self-employed; 2-5; over 6 employees) and location either in the core or in the fringe of the urban area.

Table 2.4 - Firms selected according to sector, location and size (interviews Feb-May 2008)

NACE Sector	Company	Main activity	Location	Staff
71.14 Business and management consultancy	(A)	Business radio	Toulouse	30
	(B)	Territorial development consultant	Ramonville-Saint-Agne	21
	(C)	Communication agency	Toulouse	2.5
	(D)	Communication agency	Beauzelle	4
	(E)	Web agency	Toulouse	2
	(F)	Consultant in European affairs	Toulouse	0
	(G)	Business consultant	Mondouzil	0
921-922 Motion picture and video, Radio and Television	(H)	Audio services	Toulouse	8
	(I)	Film making post-production	Portet-sur-Garonne	0
	(J)	Communication agency	Balma	12
	(K)	Animation movie making	Toulouse	4
	(L)	Distribution of sports films	Toulouse	2
	(M)	Music recording studio	Blagnac	6
	(N)	National rock radio	Toulouse	70
72.22 Web design, computer games, electronic publishing	(O)	Web agency / Web solutions	Montberon	8
	(P)	Web agency (3D)	Toulouse	5
	(Q)	Web agency / Gaming	Toulouse	9
	(R)	Web agency / Web solutions	Saint-Jean	0
	(S)	Web agency / Web solutions	Toulouse	0
	(T)	Web agency / Web solutions	Ramonville-Saint-Agne	8

Extra interviews have been realised with two associations, both active in the cinema sector. These interviews are used as complementary points of view over the situation of creative sectors, i.e. animation movie and interactive video in Toulouse.

Three types of resources have been mobilised:

−   The INSEE SIRENE database purchased in 2007 to implement ACRE surveys on knowledge intensive and creative sectors covering 342 municipalities of the Urban Area of Toulouse. It counts 1,770 companies for the 71.14 sector, 247 companies in 921-922 sectors and 491 companies in the 72.22 sector.
−   Most of the contacts have been directly taken with companies after looking at their websites. Former WP5 contacts have also been activated.
−   LOP partners have been asked by the end of January to give names of managers that could be interviewed. Two of them have been also directly solicited to be interviewed. Own internal academic networks have also been useful to get interviews with two managers in the consultancy and radio sectors.

Experts' interviews have been useful at the beginning of the research process to get recent information on the evolution of the selected sectors (Table 2.5).

Table 2.5 - Business organisations and administrations (interviews February-May 2008)

Sector	Organisation	Location
ICT	Regional Council, Regional association for the development of information society	Toulouse
Motion picture and video	Regional Council Culture and Audiovisual	Toulouse
ICT	Association promoting digital economy	Toulouse
Management consultancy	National trade-union	Labège
Management consultancy	Regional trade-union	Préserville
Services for firms	Chamber of Commerce and Industry of Toulouse	Quint-Fonsegrives
Urban cultural affairs	Municipality of Toulouse	Toulouse

All the 29 interviews (20 managers, 7 experts, 2 creative associations) have been conducted from the beginning of February to middle of May 2008. We called companies directly, asking to talk to the founder or manager in order to make an appointment. Then an e-mail was sent to recapitulate information given by phone and confirm the date of the interview. The rate of positive answer is globally very high, as we had only four rebuffs out of about 40 phone calls.

Average duration of interviews varies according to the sector. It is interesting to notice that interviews in the creative movie sector are the shortest (69 minutes). This duration can be compared to the average of 91 minutes interviews in the knowledge intensive sector of consultancy. Computer services occupy an intermediary position with an average of 82 minutes. All interviews but one have been recorded and fully transcribed.

2.2.4   *Characteristics of the sample of transnational migrants*

The two persons in charge of finding and interviewing trans-national migrants in the UAT have been selected for their previous experience either with the creative or the knowledge professional milieus. The associations of former students from engineers' schools and universities in Toulouse have been solicited at the first stage of the process. This has been efficient especially to find workers in the knowledge intensive sectors of activities (aeronautics, ICTS, electronics). Some associations displaying specific actions for foreign people have also provided some contacts, but the major part of the interviewees has been found either directly in a company and mainly by word of mouth.

There were several possible criteria to select the interview partners, some compulsory like the foreign nationality and the high level of qualification and employment in a knowledge (K) or creative (C) sector. Other selection criteria had to be considered if possible, in order to obtain a balance between male and female workers, expatriates and volunteer migrants.

Table 2.6 - The sample of transnational migrants

ID	Gender	Birth year	Place of birth	Nationality	Marital status	Children	Number of mobilities
K1	M	1968	Great Britain	British	Single	0	5
K2	M	1973	Norway	Norwegian	Married	0	6
K3	M	1984	Mali	Malian	Single	0	1
K4	M	1980	South Korea	Korean	Married	1	7
K5	F	1981	Chile	Chilean/Spanish	X	0	4
K6	F	1982	Bulgaria	Bulgarian	Cohabitation	0	1
K7	F	1974	Sweden	Swedish	Cohabitation	1	3
K8	M	1964	United States	American/Irish	Single	0	4
K9	F	1972	India	Indian/British	Married	2	3
K10	M	1984	Spain	Spanish	Single	0	4
K11	F	1968	Canada	Canadian	Married	3	5
K12	M	1968	Tunisia	Tunisian	Single	0	4
K13	M	1977	Colombia	Colombian	Single	0	1
K14	M	X	Senegal	Senegalese	Married	2	1
K15	M	1965	Germany	German	Married	0	1
K16	F	1976	Austria	Austrian	Single	0	5
K17	F	1974	Canada	Canadian	Single	0	4
K18	M	1974	Colombia	Colombian	Cohabitation	3	1
K19	M	1966	Great Britain	British	Married	2	3
K20	F	1971	Italy	Italian	Married	2	2
K21	F	1971	Germany	German	Married	1	4
C1	M	1972	Germany	German	Single	0	3
C2	M	1961	Italy	Italian	Married	2	5
C3	F	1971	Colombia	Colombian	Married	1	4
C4	M	1960	Bielorussia	Bielorussian	Single	0	2
C5	F	1981	Romania	Romanian	Cohabitation	0	3
C6	M	1974	Italy	Italian	Cohabitation	0	4
C7	M	1974	Mexico	Mexican	Cohabitation	0	1
C8	F	1977	Colombia	Colombian	Single	0	1

Source: ACRE Survey, 2008

Many migrants of the sample are quite mobile, as they have already moved in different countries before coming to Toulouse (Table 2.6). This is to be taken into account to analyse their opinion about the city, as they often tend to compare urban contexts according to their previous experiences.

Regarding the nationalities, our sample is finally composed of 29 individuals, 15 Europeans and 14 non-Europeans, namely six South-Americans, three North-Americans, three Africans and two Asians. Three of them even have a dual nationality.

Concerning the gender, we have obtained a sample where men are over-represented (17 out of 29) compared to women (12 out of 29).

The situation of expatriation, where the migrant is sent by his company to work temporarily for a subsidiary, has not been applied finally. It seemed more interesting to interview migrants that came voluntarily in Toulouse, considering that the question of attractiveness of the city is at the heart of the whole ACRE study. We decided though to include two interviews of expatriates' spouses.

We have tried to select as far as possible people that were living and working in the UAT for less than ten years, but this selection criteria has been difficult to satisfy. Our sample finally includes one fourth of migrants settled in Toulouse for 5 years or less, and one third of people living there for 6 to 10 years (Table 2.7).

Table 2.7 - Repartition of the sample according to the time spent in the UAT

Length of stay in Toulouse	Sample (29 migrants)
Between 1 and 5 years	7
Between 6 and 10 years	10
Between 11 and 15 years	8
Between 15 and 20 years	4

Source: ACRE Survey, 2008

The distribution between creative and knowledge workers is uneven, as only 8 out of the 29 interviewed migrants are occupied in cultural or artistic fields. At least 2 of the interviewees have an atypical profile, with a main profession in research (K18) or education (K1) and a parallel semi-professional activity in an artistic field.

There are also of course blind spots in this analysis. In order to lead this international comparison, some locally important target groups have been missed on purpose. In Toulouse, we did not address the associative milieu, though it plays an important part in the cultural and creative sectors.

The synthesis of the three reports per case follows a common format. The aim is to present the different actual behaviours of the distinguished target groups. A discussion of the results with members of the LOP is foreseen.

3 EVALUATION OF THE CITY REGION FROM THE PERSPECTIVE OF DIFFERENT TARGET GROUPS

In this section we compare the spatial orientations and behaviours of the different target groups. We present the main results in relation to the location choices of the different surveyed populations: employees and graduates (3.1), managers (3.2) and transnational migrants (3.3). This includes an analysis of their mobility and their opinion regarding several aspects of the living environment. In each case, we focus specifically on the differences between the creative and the knowledge sectors.

3.1 Employees and graduates

3.1.1 Past and future mobility

One important preliminary task in the analysis of the questionnaire surveys consists in taking into account the origin of the respondents. As the main objective of the whole ACRE study is to better understand the behaviour of creative and knowledge workers in terms of mobility, it is crucial to consider the effect of their personal trajectory.

Two types of indicators are particularly focused on to draw results on this mobility issue. The first one is the place of birth of the surveyed people, which informs on the family links one person can have with the city region. This is likely to influence one's decision to live somewhere. The second indicator relates to the place of studies, which partly determines the social links someone builds up before entering the professional life.

Three extra variables can be used to measure the more or less long term ties to the area. In the questionnaire, people were asked to indicate how long they had lived in Toulouse and where they lived prior to moving to the their current address. In addition to these data informing about the past mobility of the respondents, one question allows us to evaluate the propensity of the employees to leave the city in the next few years.

According to this, we can first ascertain that the local origin of the workers and graduates of the sample is quite important. Nearly one third of the respondents were born in the Midi-Pyrénées region. Including the adjacent regions (Languedoc-Roussillon, Aquitaine, Limousin, Auvergne), almost half of the sample is born in the Greater South-West of France. Around 8 per cent come from in a foreign country and only 3.5 per cent have a foreign nationality.

The relative sedentary of the people surveyed is also proved by the fact that over half of the interviewees (52.6 per cent) has been living in the metropolitan area of Toulouse for more than ten years. Moreover, 65 per cent of the sample has its prior place of residence inside the

Midi-Pyrénées region. Only 6 per cent of the interviewees have lived in a foreign country before moving in the UAT.

As far as the future mobility is concerned, the younger respondents and single persons are more likely to leave the city in the next few years. Individuals on temporary employment are also more likely to consider moving in the near future than employees with unlimited permanent contracts. The most educated (10 per cent of our surveyed population reached a PhD) are the less likely to leave the city, which pleads for a good availability of the UAT to keep extremely qualified people.

3.1.2   Reasons to live in Toulouse

In the questionnaire survey, respondents had to rank the 4 most important reasons (out of 26) to live in Toulouse. The list of choices mixed different types of factors (Table 3.1).

Table 3.1 - Most important reasons to live in Toulouse

		Ranked 1 (per cent)	Ranked 2 (per cent)	Ranked 3 (per cent)	Ranked 4 (per cent)	Cited (per cent)
Trajectory	Born here	12.0	0.5	0.0	3.5	16.0
	Family lives here	10.0	10.0	2.5	3.0	25.5
	Studied in Toulouse	19.5	9.0	3.0	4.0	35.5
	Proximity to friends	4.5	6.0	6.5	5.0	22.0
Hard factors	Moved because of my job	21.5	3.5	2.0	1.0	28.0
	Moved because of my partner's job	9.5	4.0	1.5	0.0	15.0
	Good employment opportunities	4.5	12.0	6.0	6.5	29.0
	Higher wages	0.0	2.0	1.0	0.5	3.5
	Size of city	3.5	7.5	7.0	7.5	25.5
	Good transport links	0.5	1.5	1.0	3.0	6.0
	Housing affordability	0.0	2.0	3.0	1.0	6.0
	Housing availability	0.5	0.0	1.5	1.5	3.5
	Presence of good universities	1.0	4.0	5.0	3.5	13.5
Soft factors	Weather / Climate	2.5	11.5	16.5	8.5	39.0
	Proximity to natural environment	1.5	8.5	13	9.5	32.5
	Housing quality	0.0	1.0	0.5	1.5	3.0
	Safe for children	0.0	0.5	2.0	2.0	4.5
	Open to different people	0.5	0.5	3.0	5.0	9.0
	Open minded and tolerant	2.0	2.5	4.5	4.0	13.0
	Gay / Lesbian friendly	0.0	0.0	0.5	1.0	1.5
	Language (able to communicate…)	0.0	1.0	0.0	0.0	1.0
	Overall friendliness of city	2.5	5.5	7.0	9.0	24.0
	Diversity of leisure & entertainment	1.0	1.5	3.5	4.0	10.0
	Cultural diversity	1.0	1.0	2.5	9.0	13.5
	Diversity of built environment	0.0	0.5	0.0	0.0	0.5
	Other reasons	3.0	0.5	1.0	0.0	4.5

Source: ACRE Survey, 2008

We found out that reasons related to employment and studies ranked first among the reasons for living in Toulouse (respectively 21.5 per cent and 19.5 per cent in addition to 9.5 per cent having come to the city because of the partner's job). This result can be explained by the fact that Toulouse is the major economic hub and the only large university centre in the Midi-Pyrénées region. In that regard, Toulouse is a major pole of attraction for the residents of the region, in particular students and young people looking for a job.

Soft factors appear to play a role in the attraction of the UAT in all other rankings (2 to 4), in particular weather and climate, the proximity to natural environment (the Pyrenees mountains and the Mediterranean Sea being not far from Toulouse), and overall friendliness of the city. These soft factors are also among the most cited answers. The majority of the surveyed people cite several types of reasons for living in Toulouse. Only 4 per cent of the 200 respondents cite a combination of soft factors only. Women seem to be slightly less sensitive to these types of reasons.

3.1.3   Satisfaction with the city, the neighbourhood and the job

A majority of the surveyed people (70.6 per cent) seem to be rather satisfied with the city. For those who declare that the quality of life in Toulouse has improved (25.6 per cent of the sample), reasons often cited are the arrival of the second metro line and the stopping of dangerous chemical activities in Toulouse following the AZF-plant explosion of 2001. Respondents who state that the situation has gotten worse (31.7 per cent) comment on the increase of population in the UAT, the level of traffic and pollution, the rising housing prices. Some of them also mention the increase of anti-social behaviour. More than one third of the surveyed workers and graduates agree with the statement that Toulouse is a place with tensions between people of high income and low income levels. However, **the subject that generates the most dissatisfaction among the surveyed population is related to the transport issue**. A high proportion of the interviewees is rather dissatisfied with the access to public transport (43 per cent), the level of pollution (46.5 per cent) and the traffic noise (37.5 per cent). People aged between 35 and 54 are much more dissatisfied with the transport within the city, the connectivity between city and periphery and the number of bicycle lanes than the other age groups.

We found a strong correlation between the satisfaction with the neighbourhood and the satisfaction with the city. As a consequence, differences can be noticed between the different parts of the city: those living in the first ring appear globally more dissatisfied than the inhabitants of the city centre and the inhabitants of farther periphery. People dissatisfied with their neighbourhood (over 30 per cent of the respondents) comment on the weak degree of social interaction between neighbours (34.5 per cent), the appearance of the neighbourhood (30.5 per cent) and the difficult access to public spaces (33 per cent). Nearness to employment emerges also as a rather strong preoccupation for 31.5 per cent of the surveyed.

As far as the job is concerned, high rates of satisfaction concern the intellectually stimulating aspect of the job, the friendliness of the working environment, the scope for using own initiative and the sense of achievement drawn from the work. We notice the importance of 'soft factors' at the workplace, that would come prior to soft factors offered by the city and

the neighbourhood. At last, people travelling less than 30 minutes to go to work are also globally less dissatisfied with their job (13.9 per cent) than workers with a longer travel time (29.6 per cent). A correlation exists between these two variables, and this brings back to mind the importance of time spent to move from one point to another in the city and the crucial issues of transport and mobility in the UAT.

3.1.4 Distinguishing the 'locals' and the 'non-locals'

The distinction between people having no anterior relation to the city (the 'non-locals') and people having a personal trajectory past link with the city (the 'locals') proves to be useful to address the issue of attraction factors. It helps to interpret and analyse the answers that directly refer to hard and soft factors. We can notably go beyond the expected result showing that soft factors are cited both by local and non-local workers.

Among the respondents that are from local origin, place of birth and family links are the most important reasons for living in the UAT, both in rank and in number of citations. Among the respondents who have arrived from other regions (France or elsewhere), 'hard factors' play a differentiated role. Migrants from France cite above all *Job availability*, migrants from other countries cite a mix of 'soft' and 'hard' factors.

Table 3.2 - Reasons for living in Toulouse according to the anterior trajectory

Trajectory	No	First reason (ranked 1)	%	Secondary reason (ranked 2, 3 or 4)	%	Most cited	%
Born in region	64	Born here	35.9	Born here	7.8	Born here	43.8
		Family here	17.2	Family here	29.7	Family here	46.9
				Studied here	23.4	Studied here	42.2
				Proximity friends	26.6		
Born outside region but studied in Toulouse	62	Studied here	38.7	-	-	Studied here	59.7
						Diversity of leisure	
							16.1
Born and studied outside	72	Because of my job	44.4	Weather/climate	47.2	Because of my job	48.9
		Because of my partner's job	15.3	Overall friendliness of city		Weather/climate	52.8
		Good employment opportunities	8.3	Safe of children	29.2	Proximity to natural environment	41.7
					9.7		
		Size of city	6.9			Openness	13.9
		Weather/climate	5.6			Safe for children	9.7

Source: ACRE Survey, 2008

Table 3.2 mixes the criteria 'place of birth and study' and 'reasons for living in Toulouse'. It provides a clear hierarchy of answers:
- family and place of birth are key factors for the locals to live in the UAT;
- having studied in the UAT is the key element for the former Toulouse students born outside;
- 'hard' location factors are mainly cited by 'total strangers' in the first rank (mainly job opportunities);
- environmental or 'soft factors' are cited, but clearly in a secondary position (ranks 2 to 4).

In general, those born in the region criticise more severely the working environment, traffic noise and the cost of living. Local people (ie. born and/or having studied in the region) also have a more severe opinion regarding the tolerance of the city towards people coming from other countries, visible minorities, gays and lesbians.

We identified 14 'non local' respondents (ie. who were not born and who did not studied in the region) who ranked a soft factor first among the 26 reasons to live in Toulouse. Looking closer to their profile, we find out that they are mostly male, more often occupied as managers or freelance workers, and more frequently to be found in creative sectors. They tend to be more dissatisfied than the others with the several aspect of the city environment: quality of public spaces, quality of sport facilities, quality and range of restaurants, quality of cinemas. They are less satisfied with the quality of dwelling, the open garden spaces, the quality of playgrounds, health services and social security. Furthermore, they are more likely to leave the city in the next few years (50 per cent vs 32 per cent).

3.1.5   *Differences between creative and knowledge employees and graduates*

In the creative sectors, men are more numerous than women. There is also a slightly higher proportion of people aged 35 and older (58 per cent) in the creative workers' group than in the knowledge workers' group (50.7 per cent).

If we take the places of birth and studies of the respondents into account, knowledge workers are more 'local': 35.1 per cent of them are born in the region (versus 25.7 per cent of the creative workers) and 24.3 per cent have studied there (versus 17.6 per cent in the creative sectors). However, considering the criteria of the 'prior place of residence', we can ascertain that knowledge workers are more mobile than the creative workers. Indeed 13.7 per cent of them (versus 1.4 per cent of the creative workers) have spent some times in another country before moving to their current address. This can be explained by the fact that, in our sample, their general level of education is higher than the creative workers' one.

Differences in the reasons for choosing Toulouse as a place to live
The **importance of higher education for knowledge workers** in Toulouse is proved in Table 3.3, ranking the reasons to live in Toulouse for each knowledge or creative target group (we gathered workers and graduates and split them into two categories with either a creative or a knowledge profile). A positive correlation test is found on the reason 'presence of good universities', cited by 19 per cent of respondents with a 'knowledge' profile, compared to 8 per cent of people with a creative profile.

If one takes into account the most cited reasons, whatever the ranking, we also find out that **'proximity to natural environment' tends to be more important for creative workers and graduates** (40 per cent) than for people in the 'knowledge' category (25 per cent). The weather and the climate of the region also play a significant role as 41 per cent of the creative target group cite it as a secondary reason to live in Toulouse, versus 32 per cent of the knowledge group.

The factor of the '**size of the city**' also slightly differentiates the two categories, as 6 per cent of the creative workers and graduates cite it as a first reason to be in Toulouse (versus 1 per cent of the knowledge sample).

Table 3.3 - Most important reasons to live in Toulouse according to creative or knowledge profiles (%)

	KNOWLEDGE			CREATIVE		
	R1	R 2-4	Cited	R1	R 2-4	Cited
Born here	14	5	19	10	3	13
Family lives here	9	18	27	11	13	24
Studied in Toulouse	21	16	37	18	16	34
Proximity to friends	4	18	22	5	17	22
Moved because of my job	23	8	31	20	5	25
Moved because of my partner's job	9	6	15	10	5	15
Good employment opportunities	5	26	31	4	23	27
Higher wages	0	2	2	0	5	5
Size of city	1	21	22	6	23	29
Weather / Climate	4	32	36	1	41	42
Good transport links	0	4	4	1	7	8
Proximity to natural environment	**1**	**24**	**25**	**2**	**38**	**40**
Housing affordability	0	5	5	0	7	7
Housing availability	1	4	5	0	2	2
Housing quality	0	3	3	0	3	3
Safe for children	0	6	6	0	3	3
Open to different people	0	9	9	1	8	9
Open minded and tolerant	2	9	11	2	13	15
Gay / Lesbian friendly	0	2	2	0	1	1
Language (able to communicate…)	0	1	1	0	1	1
Overall friendliness of city	2	22	24	3	21	24
Diversity of leisure and entertainment	1	8	9	1	10	11
Cultural diversity	0	10	10	2	15	17
Diversity of built environment	0	1	1	0	0	0
Presence of good universities (*)	**2**	**17**	**19**	**0**	**8**	**8**
Other reasons	3	1	4	3	2	5

Source: ACRE Survey, 2008
(*Khi2: 0.045)

Differences related to the working conditions

Creative workers are more assigned to temporary contracts than knowledge workers (nearly 90 per cent of them benefit from unlimited permanent contracts versus 68 per cent of workers in the creative industries). As a result, a higher proportion of knowledge workers intends to remain more than five years in the company (47 per cent vs 33 per cent).

Nearly half of the creative workers (45 per cent) is employed in companies with less than 10 employees, whereas knowledge workers tend to work in larger organisations. Sectors 803 (Teaching) and 73 (Research) include important public institutions such as the CNRS (French National Centre for Scientific Research). Sector 65 (Finance) also includes banks with rather large staffs.

There is a strong correlation between the position occupied in the company and the type of sector. Several distinctions can be noticed. First of all, surveyed workers of the knowledge

intensive industries occupy much more seldom manager position (8 per cent) than creative workers (26.7 per cent). Professional is the position often occupied by knowledge workers (52 per cent). Associate professionals are much more to be found in the creative sector and clerks in the knowledge sector.

Knowledge workers tend to spend less than 42 hours at their office. Creative workers find themselves in a more irregular situation (for 13.3 per cent of them, number of hours worked varies according to the week, 8.1 per cent for the knowledge workers). Other general correlation tests show that people whose hours vary ever week feel also more unstable and experience higher concern regarding job security. On the other hand, people working 43 hours and over enjoy a great satisfaction with the intellectually stimulating aspect of their job. Indeed, the sampled creative workers appear to be slightly more satisfied globally with their job than the knowledge workers.

Social networks

Mobility and reasons for choosing a city where to live is often related to acquaintances. In Toulouse, we added to the generic ACRE questionnaire some questions on personal social networks. We used a name generator asking interviewees to cite three persons that they consider as 'creative'[1]. For each of the cited persons, interviewees were asked to explain why this person is 'creative' according to them and to give some information on this person (gender, age, occupation, level of education, context of the beginning of the relation, elapsed time since the first meeting, place of residence).

Managers cite more relations than others interviewees (1.9 vs 1.6 for the whole sample). Persons working in 'creative' industry cite more relations than those working in 'knowledge' industry (1.8 against 1.2). The mean density of these networks is 0.6 (for the 73 interviewees who cited three persons), which is rather high compared to the usual density of general personal networks, but it can be explained by the fact that we have only three relations (in other words, it's a methodological effect). Networks are denser for knowledge industry (0.9) than for creative industry (0.6), which can be explained by the existence of dense professional milieus in the high technology sectors in Toulouse.

Knowledge workers are less involved in associative activities (17 per cent) than creative workers (28 per cent).

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[1] 153 interviewees declared that they know 'creative' persons, but only 138 described at least one relation with a 'creative' person. 109 respondents named two persons and 73 described three people they know. We had then 320 relations on the whole.

Satisfaction with the city: the creative group more sensitive to soft factors
Creative workers seem much less satisfied (45 per cent) than knowledge workers (61 per cent) regarding the quality and range of **festival events and cultural activities**. The quality and range of **art galleries and museums** is also more negatively criticised by them (16 per cent) than by knowledge workers (5.3 per cent), although the difference is not statistically significant. We also find a lower satisfaction rate for the creative workers (74.7 per cent) than for the knowledge workers (89.3 per cent) regarding the **architecture of the city and the quality of its monuments**.

Creative people tend also to be less satisfied with the **overall quality of life in the neighbourhood** than the knowledge workers. 17.8 per cent of the creative workers say their neighbourhood generally do not live up to their expectations (versus 6.8 per cent for the knowledge intensive workers). This might confirm that these workers are more demanding than the knowledge workers regarding their living conditions. Around 11 per cent of the creative employees (versus 3 per cent of the knowledge employees) declare to be involved at least once a week in **participating in residents' association**.

Although statistically not significant, we can observe a difference between the creative and the knowledge groups concerning the **transport within the city**. The first group is more often dissatisfied (25.3 per cent) than the second (14.7 per cent).

People with a knowledge profile are more often involved in **going to sport events**: 52.5 per cent of the creatives (versus 33.3 per cent of the knowledge) never take part to these types of activities (Table 3.4). Creative workers are more often involved in **going to festivals**, as 27.7 per cent of them (versus 40.4 per cent of the knowledge workers) declare they never participate to this type of event.

Table 3.4 - Involvement in going to sport events

			How often are involved in going to sport events				Total
			At least once a week	Less often	Never	Don't know	
Profile	Knowledge	number	7.0	51.0	33.0	8.0	99.0
		% in profile	7.1	51.5	33.3	8.1	100.0
	Creative	number	6.0	34.0	53.0	8.0	101.0
		% in profile	5.9	33.7	52.5	7.9	100.0
Total		number	13.0	85.0	86.0	16.0	200.0
		% in profile	6.5	42.5	43.0	8.0	100.0

Source: ACRE Survey, 2008
Khi2 *: 0.044

Creative and knowledge workers do not share the same preoccupations regarding several problems related to the city (Tables 3.5A, 3.6A, 3.7A). Only 9.3 per cent of them (versus 21.3 per cent) declare to be very worried about the development of anti social behaviours. Safety and crime are less preoccupying for them (18.7 per cent of them are somewhat worried, versus 36 per cent of the knowledge workers). They are also less worried by the presence of graffities (20 per cent versus 34.7 per cent very or somewhat worried), the problem of drug (8 per cent versus 14.7 per cent very worried), prostitution (21.3 per cent versus 32 per cent very

or somewhat worried). They also tend to be more doubtful on the question of the satisfaction with the police services, which tends to discontent knowledge workers more often.

The 50 graduates also distinguish themselves from the rest of the sample by their higher concern on air pollution in the city: 24 per cent of them declare to be very worried by this issue (versus 12 per cent for the creatives and 16 per cent for the knowledge workers).

3.2   Managers

3.2.1   Personal trajectories

First analyses on the whole sample show a strong proportion of 'local managers', since more than half of the interviewed were born in the administrative region of Midi-Pyrénées, 40 per cent in the UAT and two third of them have studied in Toulouse (Table 3.8).

Personal trajectory and hard factors have uppermost driven the decision of the five 'external' managers (in bold in the table) to locate in Toulouse.

Table 3.8 - Elements on managers' personal trajectory until the creation of the company

NACE Code Sector	Mana ger	Place of birth	Last degree	Education	Prior experience	Crea- tion
71.14 Business and management consultancy	(A)	Tulle	Toulouse	AL +5 Communication	Employee	2004
	(B)	Toulouse	Toulouse	AL +5 Management	Political assistant	1988
	(C)	**Nice**	**Paris**	AL +4 Management	Associated manager	1999
	(D)	Toulouse	Toulouse	AL +2 Graphic arts	Associated manager	1998
	(E)	Toulouse	Paris	AL +5 Arts and ICTs	Wed designer	2004
	(F)	**Strasbourg**	**Paris**	AL +2 Law, Russian	Political assistant	2002
	(G)	**Paris**	**Paris**	AL +3 Economy	Manager	1982
921-922 Motion picture and video, Radio and Television	(H)	Toulouse	Toulouse	AL	Musician	1998
	(I)	**Montréal**	**Rennes**	AL +3 Video	Theatre, Scene	2003
	(J)	**Paris**	**Tours**	AL +2 Social career	Video reporter	1991
	(K)	Perpignan	Toulouse	AL +5 Mathematics	Teacher	2000
	(L)	Toulouse	Toulouse	AL +5 Marketing	Probationer	2005
	(M)	Gaillac	Toulouse	AL +1 Mathematics	Music composer	1995
	(N)	Toulouse	Toulouse	?	Radio	1998
72.22 Web design, computer games, electronic publishing	(O)	Albi	Albi	AL +2 Agri-business	Associated manager	1999
	(P)	Rodez	Toulouse	AL +2 Trading	Probationer	2002
	(Q)	Bordeaux	Toulouse	AL +3 Computing	Self employed	2007
	(R)	Toulouse	Paris	AL +2 Video	Sound recorder	2007
	(S)	Marseille	Toulouse	AL +5 Finances	Probationer	2004
	(T)	Toulouse	Toulouse	AL +4 Geography	Self employed	2000

Source: ACRE Survey, 2008

Looking at general differences between the three selected sectors, following statements can be made:

– Managers of the **business and management consultancy sector** appear more mobile than in the other sectors. Three out of seven are from external origin by their place of birth and study. Furthermore, four out of seven (57 per cent) have studied outside the metropolitan region, and precisely those ones have graduated in Paris. Regarding the education received, one can observe that they have higher level of education in general. Regarding gender, this sector presents a better balance as it includes three women (43 per cent of the sample)[2]. Three have had an anterior experience as associated manager before creating their current company. This plays an important role in the constitution of the current company's networks.

– In the **motion picture, video, radio and TV sectors**, two managers out of seven are from external origin, being born and having studied outside Toulouse. This sample, where men dominate, is characterised by a greater variety of diplomas and anterior experiences. Companies tend to be older in this sector, as five out of seven exist for more than five years (created before 2002).

– Managers in the **web design and games industry** show the lowest mobility, as none of them is from total external origin. No woman is present in the sample. This sector also counts the highest proportion of companies created recently: five out of seven firms have been created after 2002.

3.2.2   The networks dimension

Only two managers didn't know anybody in Toulouse before settling there. They have made a conscious choice by comparing Toulouse with other cities in France. The determining factor has been the economic dynamism of the city and the supposed opportunity to develop a successful business in their sector (J) (F). A closely related reason is the size of the city and its demographic growth perspectives.

Some managers show a strong affective attachment to the region and say they are not ready to leave the city. This results from trajectory elements but also from soft factors such as the proximity of sea and mountains, the sunny climate, the specific atmosphere and mindset that is to be found in the South of France compared to the North. Many mention the much less strong pressure regarding the rhythm of life and compare it spontaneously to the Parisian stress.

The network dimension comes up whatever the sector. In most of the cases managers say they do not need to canvass potential buyers. The rumour effect plays positively in general. Most of the time, the satisfaction of the very first clients generates next demands and so on and so forth. The firm acquires progressively credibility and confidence from its partners who can easily check by themselves the quality of the creations.

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[2] In France entrepreneurs population is made of 26 per cent of women and 74 per cent of men (Insee, Sine 2002).

'Many clients come to us because they have seen our clients' websites on the Net'
(Web agency, Ramonville Saint-Agne, eight employees)

In the motion picture sector the usual system of temporary contracts (intermittent workers) increases the mobility of workers inside a specific professional milieu. This one is made of a relatively small number of key-companies in the production and post-production services. This generates a system where 'everybody knows everybody'.

Management and business consultancy sector also has its own features and rules in terms of networking. The size of the company, its generalist or specialised approach, are strong identification criteria in this business. The duration of the enterprise plays like an evidence of its seriousness and efficiency. The implication in official business organisations such as trade unions and lobbying associations is also crucial to get information on the potential contracts and to get a broad recognition in the long term.

Clique effect is often denounced or indicated like a specific mark of the professional milieu. Managers very seldom find this is specific to Toulouse but that it looks rather like a general feature of the markets at the national level. The network effect is indeed present and acknowledged whatever the sector. Sometimes it can play negatively and this would be more pregnant in a small-sized city like Toulouse (any city in France being unable to compete with Paris).

'If you do something good, everybody will know it and it will have a positive effect on your image and your business; but if you make the least mistake, you'll also hear of it...'
(Web agency, Toulouse, self-employed)

Firms implement several types of competencies to satisfy their clients. Let's remind that this satisfaction is crucial, as the reputation tends to act by itself and replace the role of the commercial agent inside small businesses. This will lead us to pay attention to the way information circulates inside the different professional milieus characterised by specific cultures and values.

3.2.3 Hard factors

For local as well as for external managers, **market, economic fabric and size of the city play a crucial role in the business location choices**. The rapid demographic growth of the UAT (about 20,000 extra inhabitants per year since 1999) is seen as a favourable factor by companies especially those having a link with the real estate sector.

The **opportunities to recruit well-skilled workers** and the presence of good universities are also relevant in the decision to settle in Toulouse compared to other cities in France. As far as the South of France is concerned, Bordeaux, Perpignan, Marseille and Nice are the cities managers cite spontaneously and consider as less dynamic or relevant for their sector.

Along these lines, it is interesting to notice that the **reference to Paris** is pregnant in almost every company of the business and management consultancy (74.14) and motion picture,

video, radio and TV sectors (921-922). Those ones can suffer more or less from the overwhelming domination of Paris to develop their activity. This is much less obvious in the computer-programming sector (72.22) where only two companies refer to the capital, but rather to say that they have no reason to be jealous of Paris, except casually for the clients' budgets and the higher volume of potential business.

The **lack of high-speed train connection** however is often mentioned as an impediment for the business development. The isolated character of Toulouse, '*the most remote regional metropolis from Paris and the rest of France*' (K) is pointed out in seven cases out of 20. This is obviously more pregnant for the managers who need to travel often for their business, such as the motion pictures sector and also the business and management consultancy sector.

There are actually **no cluster logics in the selected sectors**. Only one web agency located in Ramonville-Saint-Agne argues that this location was quested for two interrelated reasons: the image of a dynamic pole of specialised companies in the south-eastern part of Toulouse and the proximity of clients and companies of the same computer sector.

Hard factors also play a role at the urban local scale. Regarding the location inside the UAT, some managers justify their location choice by the proximity to their place of residence and by the fact that employees live in the area of the working place. The difficulties to park and the congestion problems in the centre come up often to explain the location in the peripheral business parks.

3.2.4   Location inside the UAT: Soft factors and creativity

Whatever their sector and the current location of their company, nearly half of the interviewed managers (nine out of 20) assert that a **position in the core city** is important for them, their employees and their clients. This is even more striking in the motion pictures and video sector (921) where four managers out of six declare they would not settle in the periphery if they had the choice. This confirms what figures show at the national and metropolitan level (see Part 2.). Along these lines, Grondeau (2008) reminds that '*a priori new media can settle pretty much everywhere but the core of large cities allow them to benefit from particular sociological, academic, artistic and cultural potentials*'.

Looking at the two other sectors, we can state that the most creative and young companies ((E), (P), (Q)) insist on this location factor as they consider it is relevant for their activity. They give different kinds of arguments that result from a mix of practical and symbolic values. For instance, they argue that accessibility through public transports, walk or bicycle is better for the environment protection.

The **image given to clients** is also one significant reason to settle in the centre, especially when they come from outside the region or from a foreign country. The metropolis is supposed to offer a quantity and diversity of sociability places like restaurants, pubs, nightclubs, theatres, museums, and opportunities of regular events like festivals.

It is also important that the image of the neighbourhood matches the image of the sector i.e. an image of cultural and artistic effervescence. At last the urban environment as a source of inspiration is mentioned directly or indirectly by some managers ((P), (A), (C), (E), (J), (N)).

Some companies insist on the good relationships they want to keep among their team and as a consequence also place **importance on the internal atmosphere**. One discourse we have heard in the communication sector relates to the small-sized aspect of the company. This would allow the manager to keep in touch with the clients needs (C) and also to protect good relations between employees, compared to large agencies where competition prizes (D).

Generally speaking, one recurrent idea that comes up relates to the qualitative versus the quantitative aspect of the production logic. This reminds what differentiates the industrial from the post-industrial era and conducts to question the specific features of the cultural industries. As A.C. Pratt (2008: 266) recalls, it is *'characterised by some unusual organisational forms: project working, networks of micro-enterprises and freelancers, an oligopolistic market structure, and a very quick product turnover.'*

The projects on which the selected companies are working on are not characterised by a standardised but rather by a customised approach of the clients needs. The creative aspect of these jobs (web design, film making, market researches...) is linked to a permanent reconsideration of ideas and concepts. This requires keeping informed about current tendencies and also innovate to increase clients' competitiveness. As seen earlier the size of the city is a major location factor, as it increases the opportunities of meeting different kind of people with different types of cultures and values, which would favour the emergence of new ideas.

3.2.5 Synthesis

What are the main drivers behind managers' decision to settle creative knowledge activities in the metropolitan region of Toulouse? Next table 3.9 puts forward striking elements that we can draw from the analysis of interviews with 20 managers from consultancy, audiovisual and web design sectors (February - April 2008). It includes results on managers' trajectories as well as main outcomes on location factors at two levels:
  1) In Toulouse (compared to other cities);
  2) Inside the urban area (centre/ periphery/ Business park).

Table 3.9 - Elements to apprehend logics behind location of selected sectors

Sector	Toulouse/ other cities	Inside urban area	Managers profile	Additional observations
74.14 Business and management consultancy	Sector driven by the national context (law evolutions) Strong hierarchy / size of companies	Very small businesses: in the periphery Medium businesses: business parks	Mobile workers Birth and studies outside Highly skilled	Size of the city crucial to develop shares of local clients Relations to public sector
921-922 Motion picture, video, radio, TV	Dependence to Paris (concentration of diffusion structures)	Centre favoured Image+atmosphere of neighbourhood Rent prices	Diversified profiles Local social networks	Locked, exclusive sector 'Clique' effect Credibility problem (animation)
72.22 Web design, Computer games	Propensity to leave the city (taxes + cheaper, competencies abroad)	Centre for the most creative activities Importance of internal atmosphere	The more local group (all have anterior link with Toulouse)	Footloose activities + trajectory effect: Does this suggest a strong influence of soft factors?

Source: Own survey

3.3 Transnational migrants

3.3.1 Education

All our interviewed, whatever their sector of activity, have reached high levels of education. The majority possess a Master 1 or 2 degree as shown in Tables 3.10 and 3.11. Most of them have achieved their latest qualification in Toulouse before being recruited in a company. This suggests that education play a major role in the integration process of highly qualified transnational migrants.

Table 3.10 - Knowledge migrants: Sector of activity, Size of the company, Occupation and Studies

ID	Activity	Company	Occupation	Highest degree	Places of study 1/2
K4	Aeronautics	Large	Engineer	Eng. SupAero	Toulouse
K7	Aeronautics	Large	Project manager	M2 Economy	Sweden/Toulouse
K9	Aeronautics	Large	Project manager	L3 Comp. Electronics	England
K10	Aeronautics	SME	Engineer	Eng. ENSICA	Spain (Barcelona)/Toulouse
K17	Aeronautics	SME	Consultant	M2 Psycho-sociology	Canada (Toronto) Sweden/Paris
K16	Aeronautics	SME	Researcher	M2 Psychology	Austria (Graz)/Toulouse
K13	Electronics	SME	Engineer	Eng. Electronics	Colombia (Bogota)/Toulouse
K14	Environment	SME	Urbanist	PhD Town Planning	Toulouse
K15	Environment	Self-empl.	Consultant	M2 Geography	Germany (Mayence)/Toulouse
K18	Health	Large	Researcher	PhD Medical Imagery	Colombia (Bogota)/Toulouse
K20	Health	Self-empl.	Orthoptist	Dipl. Health	Italy (Roma)
K21	Health	Self-empl.	Orthodontist	Dipl. Health	Germany
K1	Higher Educ.	Large	English teacher	M2 Foreign languages	England (Liverpool)
K8	Higher Educ.	SME	Project manager	M1 French / English	USA (Boston)/Bordeaux
K19	Satellite	SME	Manager	Eng. Computing	Bradford (England)
K5	Social sciences	Large	Engineer	M2 Sociology	Spain (Barcelona)/Toulouse
K6	Social sciences	Unempl.	Unemployed	M2 Sociology	Bulgaria (Sofia)/Toulouse
K12	Social sciences	Large	Assistant teacher	PhD Management	Tunisia (Tunis)/Toulouse
K2	Space	Large	Project manager	Eng. Telecom. / INSA	Norway (Trondheim)/Toulouse
K3	Telecomm.	SME	Engineer	Eng. INSA	Mali (Bamako)/Toulouse
K11	Telecomm.	Unempl.	Unemployed	Telecom/ PhD Sociology	Canada (Montréal)/Toulouse

Source: ACRE Survey, 2008

Table 3.11 - Creative migrants: Sector of activity, Size of the company, Occupation and Studies

ID	Activity	Company	Occupation	Highest degree	Places of study 1/2
C1	Music	Self-empl.	Musician	L3 Audiovisual	Germany (Hambourg)/Toulouse
C2	Press	SME	Journalist	PhD Law	Italy (Bari)/Toulouse
C3	Motion picture	Large	Lecturer	PhD Communication	Colombia (Cali)/Toulouse
C4	Fashion	Self-empl.	Fashion designer	Textile Industry	Bielorussia (Minsk)
C5	Design	Self-empl.	Graphic designer	Graphic Design	Romania (Bucarest)/Toulouse
C6	Theatre	Temp.	Musician / Actor	M2 Economy	Italy (Rome)/Toulouse
C7	Communication	Unempl.	Unemployed	M2 Communication	Mexico (Mexico)/Toulouse
C8	Motion picture	Temp.	Film maker	M2 Audiovisual	Colombia (Cali)/Toulouse

Source: ACRE Survey, 2008

3.3.2 Reasons to move in Toulouse

Table 3.12 - Coding of reasons to come in the city for the trans-national migrants of the survey

Reasons to move and stay in or leave the city	Situation towards the city (hypotheses)
STUDIES (1)	**(1A)** Erasmus students, come to the city through an agreement between universities (need to learn a foreign language, to have an experience abroad) **(1B)** / Engineers and PhD, Internship (Their project relates to an interest for an industrial sector)
JOB (2)	**(2A)** Expatriates, sent by their company for a limited period (Do not necessarily speak the language; Develop few links with locals; Seldom plan to settle in the city) **(2B)** Found a job in the city as a personal career's choice **(2C)** Followed the spouse having a job or family in the city
SOCIAL NETWORKS (3)	**(3)** Knew someone (at least 1 useful link) before coming in the city
PERSONAL LIFE (4)	**(4A)** Married or found a girl/boy friend in the city, with or without children **(4B)** Divorced with children **(4C)** Singles
QUALITY OF LIFE (5)	**(5A)** Climate / Weather, proximity to nature **(5B)** Size of the city (for dwelling, work, children, culture and leisure) **(5C)** Overall friendliness of the city, openness and tolerance of people

Source: ACRE Survey, 2008

If we try to establish a typology of the trans-national migrants we find roughly five distinct types of reasons or means to move in the city (Table 3.12). In many cases, we also have to consider a combination of different factors. Migrants that are settled today in Toulouse did sometimes come a first time for one reason, then went back to their home country or moved to another place and at last decided to come back to the city for a different reason.

According to these criteria for reasons to move and to stay in the city, we have chosen to collect and code all the mobility experiences of each migrant from their origin country and city to their current situation in Toulouse. From this, we can first draw out a very clear distinction between the trajectories and profiles of knowledge workers on the one hand and creative workers on the other hand. The role of studies and jobs play an overwhelming role in the knowledge workers' decision to move the first time, whereas social links are the most important reason to come to Toulouse for the creative workers (Tables 3.13 and 3.14).

Knowledge workers attracted by studies and job opportunities
If we exclude the two expatriates' wives, 11 out of 19 interviewees in knowledge sectors have come through a partnership or international agreement between their home countries' universities and higher education establishments in France. The second most important reason to move to Toulouse, that concerns 10 out of 21 interviewees relates to a job found in the city, either within a personal choice of career or within a couple's constraint to have a job in Toulouse (which includes K18, coming after a divorce with ex-wife and children living in Toulouse). Soft factors (coded 5) are mentioned in 4 cases in secondary positions, which means that they have influenced the decision to settle in Toulouse rather than elsewhere in France (Table 3.13).

Each migrant who moved twice in Toulouse came back because (s) he had found a job in the city. This hard factor of employment plays also an important role in their decision to stay in the city.

Table 3.13 - Reasons to move in Toulouse for knowledge migrants of our survey

ID	Country of origin	First move to Toulouse	Second move to Toulouse
K1	Great Britain	1A/5	3 / 2
K2	Norway	1B	2C
K3	Mali	1B	-
K4	South Korea	1B	2B
K5	Chile	2C	-
K6	Bulgaria	1A/5	-
K7	Sweden	1A	-
K8	United States	1A	2B
K9	Great Britain	2B	-
K10	Spain	1B	2B
K11	Canada	2C	-
K12	Tunisia	2B	-
K13	Colombia	1B/3	-
K14	Senegal	1B/3	-
K15	Germany	1B/5/3	-
K16	Austria	2B	-
K17	Canada	2B/5	-
K18	Colombia	4	-
K19	Great Britain	2B	2C
K20	Italy	2C	-
K21	Germany	2C	-

Source: ACRE Survey, 2008

Creative workers and the importance of social links

Studies are also often present in the motivation of creative trans-national migrants to come to Toulouse. Unlike the other part of the sample characterised by knowledge intensive occupations, creative workers' choice is much more based upon a social networks strategy. Studies opportunities are however important but strongly related to the presence of one direct or indirect acquaintance in Toulouse (Table 3.14). Five of the eight interviewees come from countries with quite different and lower levels of development than France.

Table 3.14 - Reasons to move in Toulouse for creative migrants

ID	Country of origin	First move to Toulouse	Second move to Toulouse
C1	Germany	4	1B/3
C2	Italy	3	4/2
C3	Colombia	3/1B	4
C4	Bielorussia	3	
C5	Romania	3/1B	
C6	Italy	3/1B	
C7	Mexico	3/1B	
C8	Colombia	3/1B	

Source: ACRE Survey, 2008

3.5A, 3.6A, 3.7A

3.3.3 Global satisfaction with the city: Creative and knowledge migrants

Tables 3.15 and 3.16 provide an overview of the opinions of knowledge workers on the one hand and creative people on the other hand about the living environment in general. Knowledge interviewees refer more to functional considerations like the transport system, the preservation of open spaces, etc. One can see that dissatisfactions concern more often cultural aspects but also openness and overall friendliness of the Tolosans by the creative workers.

Table 3.15 - Global satisfaction with the city / Knowledge migrants

ID	Home country	Architecture	Dissatisfaction	Atmosphere/ Tolerance	Transports (urban)	Culture
K1	Great Britain	nice		small village (+)	miss metro lines	(+) (-)
K2	Norway	very nice centre	awful neighbourhood	lively (+/-)	miss bicycle lanes	(+)
K3	Mali	consistent, clean	traffic	(+/-)	service stops too early	(+)
K4	Korea	small-town character	lack of identity	(+/-)		(+)
K5	Chile/Spain	homogenous, no high buildings	centre open to cars (-)	(+/-)		(+)
K6	Bulgaria	charming, lively style		(+)		(+)
K7	Sweden	very nice centre		(+)		(+)
K8	USA/ Ireland	small centre, cute	selfish people (car)	generosity (+/-)	good	(+) (-)
K9	India/GB	good general location		generosity (+)	too early	(+)
K10	Spain	quite nice		(+)		(+) (-)
K11	Canada	mix of old and new, diversity	centre open to cars (-)	friendliness (+)		(+) (-)
K12	Tunisia	very nice		(+)		(-)
K13	Colombia	nice		(+)	not enough	(-)
K14	Senegal	very nice city		(-)		(+)
K15	Germany	lit up, beautiful centre	not very nice countryside	nice people (+/-)	congestion	(+)
K16	Austria	very good	drunk people at night	nice people (+)		(+)
K17	Canada	good, small places		(-)		?
K18	Colombia	towards gated communities?	cold climate	depressive people (-)	very satisfied	(+)
K19	Great Britain	not very clean	not innovating and dynamic	easy contacts (+)	congestion	(-)
K20	Italy	dynamic city	open spaces not preserved	(+)	congestion	(+)
K21	Germany	Proximity		markets (+)	congestion/ too early	(+) (-)

Source: ACRE Survey, 2008

Table 3.16 - Global satisfaction with the city / Creative migrants

ID	Home country	Architecture	Dissatisfaction	Atmosphere / Tolerance	Transports (urban)
C1	Germany		intolerance for noise, Paris centralisation	cool, brotherly (+)	walking and bicycling (+)
C2	Italy	nothing important	too provincial. insufficient cultural offer	not so hearty (+)	2nd line metro (+)
C3	Colombia	too homogeneous, nice public space	lack of energy = the old world	open minded, experimental (+ / -)	Satisfied
C4	Bielorussia	very nice	big city sleeping dead city	aggressive and unsecure (-)	-
C5	Romania	old centre (+), modern (-)	Not creative enough. Lack of experimentation	Scepticism, good diversity (-)	-
C6	Italy	very nice historical centre	not many interesting thing to see. A big cultural project missing	Welcoming city. Easy to make contacts (+)	some places not well connected
C7	Mexico	nice centre / lack of modern architecture	too small	Cold, lack of curiosity (+ / -)	-
C8	Colombia	nice	too quite	Quite (+)	-

Source: ACRE Survey, 2008

3.3.4 Reasons to stay in or to leave Toulouse

Hard factor of employment plays an important role in the decision of knowledge workers to stay in the city (Table 3.17). The spouse's professional situation plays often in the decision to settle in the city. The possibility to create one's own company, related (or not) to the economic specialisation of the city might influence the will of migrants to remain in Toulouse. For migrants coming from Spain or Italy, higher wages are also an important reason not to leave the city. More than half of the sub-sample cite a soft factor, related to quality of life, as a reason to stay in the city. It is always combined with one or two other reasons, mostly linked to satisfaction towards their job's situation.

One case can be mentioned as specific regarding this issue, as the interviewee came back to Toulouse after being returned in his home country for a few months. Twelve years later, this person is still living there and do not really plan to leave the city, except for Latin America for instance. One might talk of the role of soft factors (atmosphere, diversity, friendliness) in his case because he did not come back for a professional reason.

The size and the general atmosphere of the city are often mentioned by the knowledge migrants. This aspect can even be considered as more important than the level of income. The geographical location of Toulouse, compared to other cities in France, can also much influence the decision to stay.

In the creative workers' case, reasons to stay are much more strongly related to personal life and couple's situations (married or living with someone, having children...). Getting married (or at least finding a partner) is mentioned as an important reason not to leave the city. Job appears as a second motivation to stay but further analyses show that in this sample, it also plays as a negative factor, leading to the decision to leave the city one day. These interviewees are often much more critical towards the global atmosphere of the city. Only three of them mention and rank last a soft factor as a reason to stay in Toulouse.

Table 3.17- Reasons to stay in Toulouse for knowledge migrants

ID	Origin country	Reasons to stay
K1	GB	3/2/5
K2	Norway	4/2/5
K3	Mali	2/5
K4	South Korea	2
K5	Chile	4/3/5
K6	Bulgaria	3/5
K7	Sweden	2/4/5
K8	United States	2
K9	GB	2/4/5
K10	Spain	2/5
K11	Canada	2/4
K12	Tunisia	2/5
K13	Colombia	2
K14	Senegal	4/5/2
K15	Germany	2/3/5
K16	Austria	2
K17	Canada	2/5
K18	Colombia	4
K19	Great Britain	4/2
K20	Italy	2
K21	Germany	2

Source: ACRE Survey, 2008

Table 3.18 - Reasons to stay in Toulouse for creative migrants

ID	Origin country	Reasons to stay
C1	Germany	4/2/5
C2	Italy	4/2
C3	Colombia	4/2/3
C4	Bielorussia	3/2
C5	Romania	4
C6	Italy	2/4/3
C7	Mexico	3/5
C8	Colombia	4/3/5

Reasons to leave Toulouse

The high level of taxes is mentioned by migrants who have created or who plan to create a company in France. Salaries are also mentioned by people that would receive a higher income if they were doing the same job in their home country. The general cost of living also plays a role in some cases. Professional dissatisfactions, much higher for creative workers, are also a reason to leave the city for some knowledge workers.

Some surveyed migrants are attracted by larger cities than Toulouse. Soft factors, like weather and climate, but also the inhabitants' mindset might also play a role in the decision to leave a country. South Americans in particular seem to suffer from a colder climate very much. Some migrants also mention other types of social relationships they could find if they were moving elsewhere. The same type of observation has been made by someone who finds it difficult to meet people of the same age in Toulouse (35).

3.4   Summary Matrix 1

The following matrix shows differences between the three target groups in terms of the relative weight they give to the various factors.

Table 3.19 - Summary Matrix 1: Main hard and soft factors influencing decision-making of target groups

		Hard factors		Soft factors		Personal attachment	
		Attraction	Retention	Attraction	Retention	Attraction	Retention
Employees	**creative**	Job		proximity to natural environment + open minded and tolerant		Family + Studies	
	knowledge	Job		weather		Born here + Studied here	
	graduates	Job		overall friendliness of the city		Studies	
Managers	**creative**	Size of the city	-	overall friendliness of the city, weather	weather, quality of life	Born here	
	knowledge	Size of the city	Business opportunities	Weather		Spouse	
Migrants	**creative**	Studies	-	Overall friendliness		Social networks	Family
	knowledge	Studies and Job	Job, Size of the city		tolerance	-	Family

Comments on matrix 1

Hard factors

For the target group of **employees and graduates**, **job** is clearly the main attraction factor to the city of Toulouse. The questionnaire does not allow to actually draw conclusions on their reasons to stay in the city. However, as we saw previously, the most educated (PhDs) as well as employees with unlimited permanent contracts are the less likely to leave the city in the next few years. On the other hand, younger respondents, single persons and individuals on temporary employment are more likely to consider moving in the near future. Thus **the retention in the city seems to be much linked to the job security and also to personal reasons** (mainly meeting someone with whom sharing one's life).

The size of the city is the main attraction factor for the **managers**. This criterion relates to the size of the market, i.e to the opportunities to develop a business. The size of the city

determines the presence of other companies that can be competitors, sub-contractors, or co-contractors. It has also direct implications on the availability of the labour force, which often needs to be specialised or highly qualified in some specific activities. In the interviews, managers also referred to the fast growing demography of Toulouse in the last few decades, which is seen as a very positive trend for business. This is notably obvious for web design companies that have won contracts with real estate agencies.

The quantity and quality of offices and facilities also play an important part in the decision of entrepreneurs to settle a business at a certain location in the country and inside the urban area. Linked to the quality of the transportation system and to the level of infrastructures, the accessibility of the company - for its employees as well as for its clients - is also crucial in the decision making process of moving from one place to another when the firm starts thriving and growing.

As far as **retention** is concerned, it is not easy to establish a clear statement among the most important hard location factors. We see however the already mentioned distinction between the creative and knowledge target groups. For the latter, **business opportunities** are considered as an important reason to remain settled in Toulouse. The city's development pathway towards high technology and knowledge intensive activities plays in favour of the decision of managers in the business and management consultancy sector not to leave the city. The web design companies, whose activities are close to the computer sector (which is strong in Toulouse) also feel quite comfortable with their location in the UAT. On the contrary, the weakness of creative and cultural industries in the local economic fabric seems to act more as a '*push factor*' for managers in the film making and video sectors. Here, the size of the city – in relationship to its image - can be considered as not satisfying, especially compared to Paris where most of these activities are concentrated.

Studies opportunities are overwhelming in the decision of **transnational migrants** to move to the city. The existence of partnerships or agreements between French and foreign higher education institutions constitute an opportunity for people to move abroad. The study on transnational migrants confirms the advantage given in Toulouse to knowledge intensive profiles regarding several aspects: accommodation conditions of students, adequacy of the job market. The **job and the size of the city** act as **retention** factors for interviewees working in knowledge sectors, while we cannot determine any important „hard factor" for creative workers. As in the managers' case, the job market in Toulouse for cultural, artistic and media activities do not match the creative transnational migrants' expectations.

Soft factors

Creative employees assess the **proximity to natural environment and the open minded and tolerant atmosphere of the city** as an important attraction or retention factor. Knowledge employees are more likely to cite the **weather** as a reason to be or to stay in Toulouse. The **overall friendliness of the city** is seen as an advantage of the city by the graduates, the creative and knowledge managers, who also cite the weather as a positive aspect of Toulouse. The **quality of life** is one important retention factor cited by the managers of the creative industries. Although Toulouse presents weaknesses in terms of business

opportunities and working conditions, creative entrepreneurs, especially film makers and advertisers, recognise the good level of their personal living conditions in this city (climate, housing, cost of living, rhythm of life). The comparison with Paris is quite frequent as they have to travel there quite often to meet partners. The capital appears like the only serious alternative, only for job reasons. However, some creative people justify their choice for staying in Toulouse also for professional reasons. Indeed, they argue that a smaller city with a smaller market gives the opportunity to be more visible and to differentiate oneself more easily than in huge anonymous capitals.

As far as **transnational migrants** are concerned, one finds a difference in their appreciation of the 'soft conditions' offered by the city of Toulouse. Creative foreigners are attracted by the **overall friendliness** of the city but do not cite any conditions relative to the atmosphere of the city as an important reason to stay. On the other hand, knowledge workers mention the **tolerance** as a retention factor, which suggests that they feel well integrated as foreigners and workers in the Tolosan metropolis.

Trajectory factors

Among the different types of trajectory factors, **being born** in the region is the main attraction factor for creative managers, whereas knowledge workers cite the presence of their spouse as a reason to come in Toulouse.

Social networks built during the studies are important for employees and graduates whatever the sector.

Retention factors can be identified only in the target group of transnational migrants, who clearly cite the **family** as a main reason to remain settled in Toulouse. As we already underlined, an important attraction factor for creative foreign workers is the presence of acquaintances in the city.

4 EVALUATION OF THE CITY REGION FROM THE PERSPECTIVE OF LOCAL CONDITIONS (FACTORS) AND POLICIES

4.1 Strong and weak points of the city-region regarding the capacity to accommodate creative knowledge

The objective of Matrix 2 is to identify strong and weak points of city regions regarding different location factors. Based on the local results we have to evaluate the importance of certain location factors regarding the target groups. The different target groups, coded in the following table (Table 4.1), are placed into the matrix. In this part of filtering process we should refine our findings on location factors and identify those factors playing an important or insignificant role in attracting or retaining creative and knowledge intensive people.

Table 4.1 - Coding of the different target groups

		Codes
1 Employees	Creative	**1A**
	Knowledge intensive	**1B**
	Graduates	**1C**
2 Managers	Creative	**2A**
	Knowledge intensive	**2B**
3 International migrants	Creative	**3A**
	Knowledge intensive	**3B**

In the following matrixes, we focus on the assessments of each target group regarding the performance of the city in different fields of the urban environment. A general matrix (Table 4.2) summarises the main elements of the findings. Then we present and comment separately the list of factors that are assessed either positively (Table 4.3) or negatively (Table 4.4) by the different categories of surveyed and interviewees. After commenting on the strengths and weaknesses of the city, we also isolate the subjects where the respondents have expressed clear different point of view (Table 4.5).

Two items among 'soft factors' are considered as strengths of Toulouse by the majority of the interviewees. The geographical dimension refer to the location in the South of France and to the proximity of the Mediterranean Sea, the Pyrénées mountains and the Atlantic Ocean, all offering a wide range of sport and leisure activities. Another type of soft factor 'everyday life' is also much prized by the surveyed target groups. This relates to a global appreciation of the quality of life and maybe to the feeling that in general things are made easier in Toulouse compared with other bigger cities. This result is consistent with the good appreciation by the managers and the transnational migrants of the living conditions in the 'hard factors' category.

Table 4.2 - Summary Matrix 2: Evaluation and positioning of the metropolitan region according to different location factors

	Strong	Medium	Weak
Hard factors			
International accessibility		3	
National accessibility			2
Employment	2B		
Job offers, career opportunities	1B		1A
Working conditions	2B	2A	
Type of contracts, salary, working facilities			
Education and study	1C, 3B		
Universities, higher education	1B	1A	
Transports within the city			1
Social infrastructure			
Kindergartens, schools, international schools		3	
Health and medical facilities	1		
Housing conditions			
Dwelling stock (number, composition, ownership structure)			
Price of housing, affordability and availability		1	1C
Social housing and rental sector			
Living conditions	2, 3	1	
Price of living, overheads, other expenses			
Taxation system			2
Subsidies, allowances	3B		
Soft factors			
Quality of the environment (environment of the city region)	1, 2	3	
Geographical dimensions, location	1, 2, 3		
Image of the city	2B	2A	3A
Cultural milieu (in broader sense)		2A	1A, 3A
Language or language barriers		3	
Attractive architecture		3A	1A
Attractive residential environment			
Working environment			
Flexibility of timetables			
Attractive environment (calm, greenary)			
Everyday life	1, 2, 3		
Cultural, leisure, sport and entertainment possibilities	3B		
Services, retailing and shopping networks, gastronomy	3		
Tolerance, acceptance of diversity, openness	3		
Social cohesion, equality		1	
Personal trajectories			
Born here	1, 2		
Family reasons			
Parental family lives here (parents live here, grew up here)			
Current family status, background (marriage, wife and/or children)			
Followed partner			
Social networks			
Private sphere: Friends, acquaintances	3A		
Professional sphere: Contacts, working staff		2A	3A

In general, we notice that the target group of transnational migrants is more visible in the table addressing the strengths of Toulouse (Table 4.3), whereas employees appear more present in the table dealing with the weaknesses of the city (Table 4.4). Only foreigners express a clear – positive – opinion on the issues of tolerance, acceptance of diversity and openness, and also on the level of services, retailing, shopping and gastronomy. The sub-group of knowledge transnational migrants also appear very satisfied with education and study, subsidies and allowances as far as hard factors are concerned. Most of them working in 'flagship' industries and / or having studied in engineers schools assess cultural, leisure, sport and entertainment possibilities as strengths of Toulouse.

Table 4.3 - Strengths of Toulouse according to the different target groups

STRENGTHS	
Hard factors	
Employment	2B
Education and study	1C, 3B
Health and medical facilities	1
Living conditions	2, 3
Subsidies, allowances	3B
Soft factors	
Geographical dimensions, location	1, 2, 3
Everyday life	1, 2, 3
Cultural, leisure, sport and entertainment possibilities	3B
Services, retailing and shopping networks, gastronomy	3
Tolerance, acceptance of diversity, openness	3
Personal trajectories	
Born here	1, 2
Private sphere: Friends, acquaintances	3A

The weaknesses of Toulouse for the sub-groups of creative employees and transnational migrants are clearly expressed in the following table. Job offers and career opportunities are judged unsatisfying, and other critics relate mainly to soft factors, especially the cultural milieu in broader sense that should largely be dynamised. It is interesting to see that the image of the city is an important element for people coming from abroad and judged negatively by those working in the creative industries. The reputation of the city has no real positive effect on their profession, unlike the knowledge workers. This observation goes along with the judgement on the lack of professional contacts in their creative and cultural fields.

Creative employees who have often lived in the city longer than the transnational migrants pay more attention to the Toulouse's architecture, which they consider as not attractive enough.

The weaknesses of Toulouse for managers rely essentially on the lack of high speed trains, which impedes accessibility at the national level. The taxation system is also a problem for them, but this refers more to the national law context. For all the employees, transports in the city are not developed and efficient enough.

Table 4.4 - Weaknesses of Toulouse according to the different target groups

WEAKNESSES	
Hard factors	
National accessibility	2
Job offers, career opportunities	1A
Transports within the city	1
Price of housing, affordability and availability	1C
Taxation system	2
Soft factors	
Image of the city	3A
Cultural milieu (in broader sense)	1A, 3A
Attractive architecture	1A
Personal trajectories	
Professional sphere: Contacts, working staff	3A

Next table shows clearly that the city is much more adapted to knowledge workers than to creative workers. Creative managers situate themselves in an intermediary position as far as the working conditions and the professional sphere are concerned. The image of the city is an issue that raises very divergent opinions according to the target group. Creative transnational migrants are really suffering from the lack of international cultural influence of Toulouse.

Table 4.5 - Divergences of opinions of the different target groups regarding several factors

DIVERGENCES	Strong	Medium	Weak
Hard factors			
Job offers, career opportunities	1B		1A
Working conditions	2B	2A	
Universities, higher education	1B	1A	
Price of housing, affordability and availability		1	1C
Living conditions	2, 3	1	
Soft factors			
Quality of the environment (of the city region)	1, 2	3	
Image of the city	2B	2A	3A
Cultural milieu (in broader sense)		2A	1A, 3A
Attractive architecture		3A	1A
Personal trajectories			
Professional sphere: Contacts, working staff		2A	3A

4.2 Site specific or ubiquitous indicators?

4.2.1 Specific indicators

Geography

Site specific indicators relate first of all to the geographical position of Toulouse and to the climate and mindset of the south-western Midi-Pyrénées region. Many interviewees appreciate the position of the city, located one hour far from the Pyrénées mountains and to the Mediterranean Sea on the one hand, and three hours from the Atlantic Ocean on the other hand. In terms of surroundings, Toulouse benefits from the rural landscapes of the Midi-Pyrénées region, which displays one of the lowest densities in Western Europe (19 inhab./km2). Although the regional language, Occitan, and its dialect, Gascon, have for the most part disappeared, they have left a strong imprint on the French spoken in the region (Peyroux et al. 2007).

Physical layout of the city

Toulouse is one of the largest communal territories in France (118 km2), just before Paris and Lyon. The city is composed of varied types of neighbourhoods: the population density is globally quite low. Like many cities in Europe, the UAT is organised around nearly concentric zones, with a core characterised by narrow streets and fortifications inherited from the *old roman city* and the *Middle-Age*. Until the late 1960s, the city only had '*faubourgs*' (Bonnefoy, Saint-Cyprien) that developed in the 18th and 19th century, with predominant individual houses. As a consequence, the city does not present many high buildings and is often described, especially by the transnational migrants, as a 'big village'. The expansion of the *suburbs* took place in the 1970s over surrounding villages (Colomiers, Blagnac).

Standardised high-density and high-rise social housing ('*grands-ensembles*') located in the outskirts of the city are part of the communal territory, which differs from the situation in other large cities (e.g. Lyon or Bordeaux) where these neighbourhoods are mainly to be found in the peripheral communes.

Demography: One of the most dynamic urban areas in France

Toulouse Urban Area (UAT), with 1.1 million inhabitants (2007) is the fifth urban area by population. Only 40 per cent of its population in France (437,000 inhabitants) live in the core municipality (city of Toulouse). A significant net migration reflects the attractiveness of the UAT, comprising 342 communes and stretching over 4,015 km2. The UAT's increasing annual growth rate in the 1999-2007 period (1.9 per cent compared to 1.6 per cent 1990-1999) represents the arrival of around 20,000 extra inhabitants each year. The city benefits from a general migration trend to the south of France for several years, but other reasons explain its attractiveness, like the unbalanced structure of the regional urban settlement. The UAT concentrates now nearly one third of the population of Midi-Pyrénées (45,000 km2, 2,800,000 inhabitants in 2008), but it is also the only large university and higher education centre for the whole region, attracting residents mainly for studies and job opportunities.

Education and economy

The specialisation of Toulouse in the fields of higher education and research dates back to the early 19th century. Apart from the region of Paris, Grenoble and Toulouse are the most important urban innovation systems in France. The dominance of highly specialised industries (e.g. electronics, aeronautics, space) has an influence on the profile of the city region.

The social division of labour and the labour market, dominated by highly qualified jobs in computer industry, electronics and management and consulting services, have generated a high degree of social polarisation. Specialised 'Centres of excellence' developed by local authorities along with major adjacent urban renewal projects have shaped strong differentiation between sectors of activities and between centre and periphery (Peyroux et al 2007).

The population of the UAT has a high level of education compared with other urban areas: 26 per cent of the population aged above 15 have completed degrees in higher education. Toulouse is among the urban areas in France that has the highest household incomes. In 2001 half of the inhabitants belonged to a household which earns more than €16,129 per year (the median regional income is 14,000) (AUAT-INSEE, 2005a). Disparities between incomes are sharper than elsewhere in the country, in particular within the city-centre as opposed to the suburbs and periurban areas.

4.2.2   Ubiquitous indicators

Audiovisual sector: The overwhelming position of Paris

In France the audiovisual sector is definitely marked by a strong centralism. Successive national governments from the 1960s have not promoted like in Belgium or in Italy a dense network of local televisions and radio relay stations. 2008 INSEE figures show that Île-de-France concentrates over 50 per cent of these 30,544 firms registered in one of the specialised fields covered by the audiovisual sector. The Paris domination is actually obvious in the field of contents production. For instance, 74.5 per cent of cinema picture and video production activities (5911C) gather in Île-de-France, 59 per cent in the only commune of Paris. Over 62 per cent of motion picture, video and television programme production activities (5911A) are settled in Paris and its adjacent western *département* of Hauts-de-Seine that comes second in most of the audiovisual sub-sectors.

The weight of the Urban Agglomeration of Toulouse (UAT) appears clearly weak in the motion pictures, video (921), Radio and TV (922) activities compared to the overwhelming domination of Paris but also to the presence of more dynamic regions regarding those cultural sectors in France. The unbalance between the capital city and the rest of the country is illustrated by the gap between the first and the second ranked[1] départements, Paris accommodating 32 per cent of the total number of existing companies and Bouches-du-Rhône (Marseille) only 3 per cent. Regarding this share and considering heads of the départements,

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[1] Excluding Île-de-France and overseas French départements (Guadeloupe, Martinique, Guyane, Réunion).

Lyon (2.36 per cent), Lille (1.81), Bordeaux (1.69) and Cannes (1.64) do better than Toulouse (1.52) and Montpellier (1.49).

Urban sprawl and social tensions

Periurbanisation occurred in Toulouse while the '*grands ensembles*' as an urban model were contested and individual housing or small-size collective housing was developed. This type of housing attracted the middle classes to the suburbs –skilled workers, employees, executives and intellectual professionals (Peyroux et al. 2007). One consequence of the periurbanisation is the urban sprawl and the growing rate of personal car use. This entails pollution and congestion problems that hard difficult to tackle.

From a social point of view, there is a huge contrast in Toulouse between well developed areas, concentrating the highly qualified workforce, and neighbourhoods with a high concentration of less educated and unemployed people (including migrants from Maghreb). The economic development model raises the issue of the professional integration of low or unqualified populations in a highly specialised urban area. In November 2005, quite violent riots occurred in Toulouse like in several French cities, particularly in deprived neighbourhoods. This shows that underlying tensions can be aroused at any time, despite the general economic welfare of a city.

4.3 Path dependency. A second attempt, based on the various empirical results

Theories of path dependency are reaffirmed as helpful to better apprehending a city or a region's chances to specialise in creative and innovative activities and attracting the talent it needs. This largely depends on historical traditions and on the ability to adapt to new circumstances as well as to grasp new opportunities (Hall, 2004). Based on the various empirical results of the ACRE surveys (WP5, 6 and 7), this section tries to draw some ideas about the way Toulouse could at the same times build on its existing strengths and look for new developments in the creative sectors. It seems then useful to first briefly remind the characteristics of the city's development pathway from a low industrial base to a complex 'local skills system' (Grossetti *et al.,* 2006), based on electronics.

4.3.1 *The development pathway of Toulouse from a low industrial base to a complex high tech skills system*
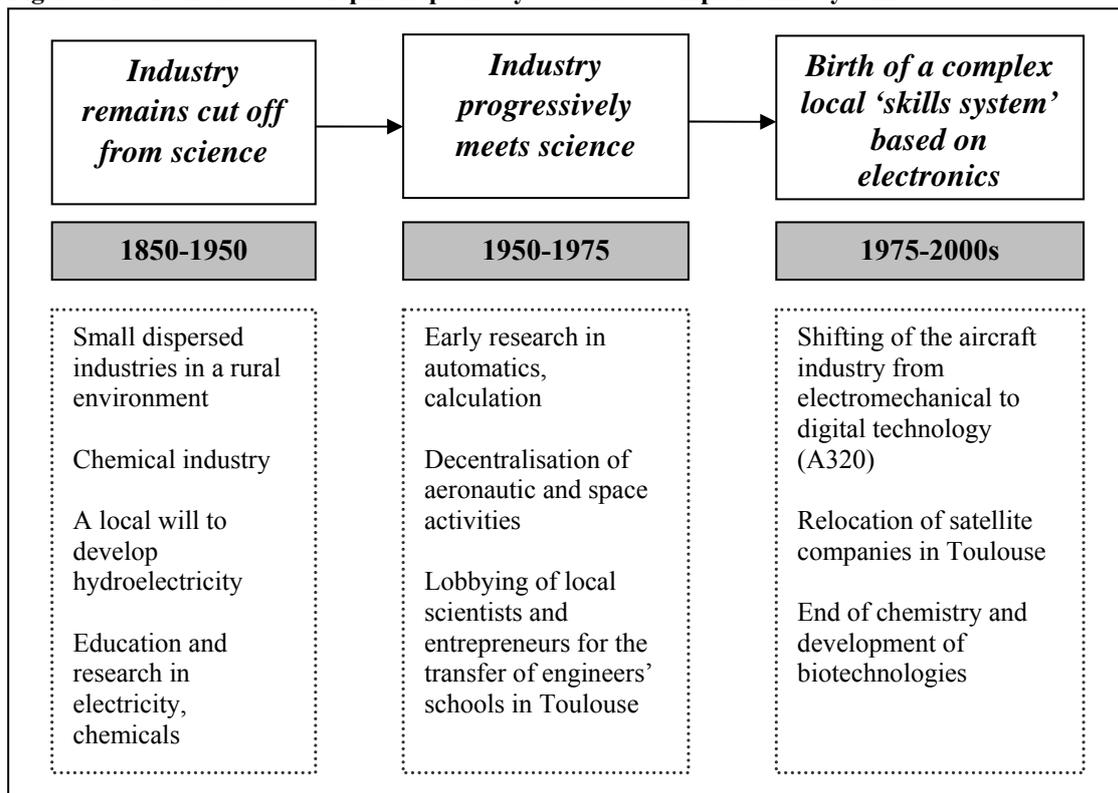
Three periods can be identified in the development path of Toulouse (Figure 4.1). Until the middle of the 20th century, with the exception of the chemical industry, the economy was characterised by small-scale, scattered industries producing mainly manufactured goods (Olivier, 2007). Even the production of aircraft, which developed during the First World War, was a small-scale activity that did not integrate a high level of technology. However the will of local politicians and academics to implement an activity based on hydroelectricity enabled the local scientific potential to develop from the 1910s onwards (Grossetti and Milard, 1997).

A big change occurred in the years after 1945, when the state decided to strengthen aeronautical activities and decentralise several specialised education and research institutions to Toulouse. It is also important to remind that local scientific leaders played a significant part in this choice by pleading, as soon as in the 1950s, for the transfer of the National School of Aeronautics, which was followed by the transfer of the National Higher School for Aeronautical Engineering (1961) and the National School of Civil Aviation (1968).

Whereas they remained cut off in the first part of the 19th century, industry, local research and the higher education system really started to become connected and impact on the economy of Toulouse with the decentralisation of the National Centre for Spatial Studies (CNES) (Grossetti, 1995). This institution was indeed not only a research centre but also an industrial agency in charge of developing the national spatial industry.

The enhanced local scientific potential was progressively associated to the growth of aeronautics and space industry in the 1970s. The following shifting of the aircraft industry from electromechanical to digital technology gave birth to the current local innovation system mainly based on electronics (Grossetti, 2001). From the 1980s onwards, several firms specialised in the field of satellites settled in the area of Toulouse and started to massively recruit engineers.

Figure 4.1 - Toulouse's development pathway towards a complex skills system

Industry remains cut off from science	*Industry progressively meets science*	*Birth of a complex local 'skills system' based on electronics*
1850-1950	1950-1975	1975-2000s
Small dispersed industries in a rural environment Chemical industry A local will to develop hydroelectricity Education and research in electricity, chemicals	Early research in automatics, calculation Decentralisation of aeronautic and space activities Lobbying of local scientists and entrepreneurs for the transfer of engineers' schools in Toulouse	Shifting of the aircraft industry from electromechanical to digital technology (A320) Relocation of satellite companies in Toulouse End of chemistry and development of biotechnologies

Martin-Brelot 2009, adapted from Grossetti (2001)

The notion of 'local skills system' (Grossetti *et al.,* 2006) is used to characterise an economic specialisation which relies much more on types of skill - in Toulouse namely in electronics and computing - than on the manufacturing of a specific product. For instance, digital technology allows sub-contractors to work indifferently for aeronautical or automobile

construction. This has been demonstrated by Zuliani (2008) with the case of on-board systems. Based on the production of software and calculators, on-board systems are integrated into various types of machine (aircraft, space vessels, automobiles, rockets, satellites, mobile phones, rail traction systems…), and thus apply to what are initially quite different activities.

This puts into perspective the issue of the single sector dominance, although the reliance on the performance of one large multinational company, Airbus, creates some worry in an uncertain and changing global economy. Furthermore, the city more recently started to develop a second local skills system based on biotechnologies and health. Important activity within these fields results from the spread of local university laboratories (developed in the 1970s) and are boosted by two large pharmaceutical companies, SANOFI and Pierre Fabre.

To sum up, the constant focus on education through the location of universities, higher education establishments and research institutions have created a broad knowledge base. The assets of Toulouse can be related to three important statements (Peyroux et al. 2007):

1) a population accustomed to long term general studies and to achieving high-level degrees,
2) a concentration of higher education and research institutions,
3) a real economic dynamism in the field of computer and electronic systems conception as well as in the biotechnologies sector. Today, the UAT polarises 85 per cent of the metropolitan area's[2] higher metropolitan employment, especially in the research and the computer sectors (executives, engineers) (AUAT, 2008: 41).

4.3.2   Toulouse's profile and ACRE results

The results of the three empirical studies conducted within the ACRE project are widely consistent with the development pathway of Toulouse and with the S.W.O.T analysis (Figure 4.2) which presents Toulouse's challenges in terms of competitiveness and attractiveness. Since the late 19th century, the development was essentially *knowledge driven* and led to a specialisation in high technologies such as aeronautics, space, electronics and biotechnologies. Creative industries remains marginal in the local economic fabric.

First of all, our results confirm the overwhelming role of the academic system in Toulouse. Most of the interviewed employees and managers have been studying in the region. This statement also applies to trans-national migrants for which the quality and the quantity of the higher education offer in Toulouse has influenced their decision to move there.

Then the efforts we made to differentiate people from the different sub-sectors was also very helpful to put forward the unbalance between engineers or scientists on the one hand and people working in the fields of human sciences, art or culture on the other hand. We saw that their relationship to work as well as their working conditions can widely differ. Furthermore

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[2] In 1999, 1,300,000 inhabitants live in the urban metropolitan area composed of the urban areas of Toulouse, Montauban, Albi, Castres, Mazamet, Pamiers, Foix, Saint-Gaudens, and Auch.

their opinion regarding the city and their use of urban facilities and services are also quite different.

In the first survey among employees (Martin-Brelot, H., M. Grossetti, E. Peyroux, D. Eckert & C. Thouzellier, 2008), the creative workers appear less satisfied than the knowledge workers regarding several aspect of the quality of life in Toulouse. They have a more severe opinion about the quality of cultural events (festivals, cultural activities), the quality of galleries and museums, and the quality of architecture and monuments that are to be found in Toulouse. When looking at the most important reasons to live in the city, we also noticed (Table 3.3) that the quality of the higher education system is not as decisive for them as it can be for the knowledge sub-group.

The greater importance of social networks for the creative workers' target group is shown by the fact that these surveyed are more often involved in associative activities and in residents' associations than the knowledge workers. The role of personal links in the decision to move to Toulouse was also largely confirmed in the survey among transnational migrants (Martin-Brelot, H., C. Thouzellier, M. Grossetti, & D. Eckert, 2009). On the one hand, people working in the well developed high-tech industries of Toulouse (electronics, aeronautics, space, telecommunications) declare that their main reason for choosing this city is the presence of specialised higher education institutions. On the other hand, the creative foreigners rank first the presence of acquaintances as a main reason for being in Toulouse. The local job market is much less favourable for their activity branches (motion picture, music, design) than it is in the case of the knowledge intensive sectors. As a consequence, their reasons to stay in Toulouse are also widely related to their personal life's constraints, whereas knowledge workers cite the job as a major retention factor (see Tables 3.17 and 3.18).

Qualitative surveys among managers and transnational migrants allowed us to address the issue of the image of the city, which is crucial in the debate about urban competitiveness and attractiveness. A major criticism made by managers of audiovisual and web design sectors to local leaders refers to their scepticism towards emergent, small and flexible businesses related to arts and entertainment. When asking companies covering the image consultancy sector what stimulates or slows down their creativity, the answers are related to money and budgets but also more to the lack of ambition of their clients and the city in general. The two following quotations sum up the relative frustration of Tolosan creative managers.

> *'(...) We are in a world of image, creativity thus is related to a dynamic; for instance in Barcelona, there is the modern architecture; we need to have a dynamic ('mouvance'). Toulouse slugs, it doesn't move compared to other cities where I've travelled in Europe.'*
> (Communication agency, Balma, 12 employees)

> *'Cultural policies do not make enough to promote independent cultures... Helping emergent cultures to express themselves means to wager on the future. They must give the means to make it seriously, I mean... for instance, the acoustics of the hall must be good to hear a concert.'*
> (Web agency, Toulouse, 2 employees)

Until now, mostly knowledge-based activities and competencies have been put forward in the communication and economic policy of the city region. Paying attention to creative strengths present on the territory, but also to weaknesses and difficulties of specific professions might help local authorities to play a useful role for emergent markets related to entertainment. The analysis of the competences that are mobilised by companies in the web design and audiovisual sectors (Martin-Brelot, H., M. Grossetti, D. Eckert & C. Thouzellier, 2008) allowed us to notice the connections between the knowledge and the creative sectors. Considering the types of services, competences and techniques offered by the interviewed firms, we could identify five major types of know-how used by them: web solutions, strategic intelligence, image consultancy, sound and video, arts and design.

Two recent initiatives show how the city tries to build on its existing strengths related to knowledge-intensive activities and connect them with emergent trends in the field of arts, culture and entertainment. The first project is linked to the development of serious games, with the creation of a *Game Consort* which aims at promoting synergies between scientific, politic and industrial milieus. Although national, with head-office in Paris, this association has roots in Toulouse, as it is initiated by a young PhD from IRIT (Toulouse Research institute for computer science) and includes several research units from the region. This initiative is supported locally by the main association acting for the development of the 'digital economy' (*La Mêlée numérique*).

The second initiative relates to the launching by the City Council in 2009 of a new festival ('La Novela', a knowledge and artistic festival) which associates both fields of science and art. Many events and meetings are organised around four themes among which the digital city and the image. The aim for Toulouse is to catch up and become a hot-spot for scientific culture at the national and international levels and to include scientific culture among culture itself. This is not the first attempt as between 1986 and 1996, was organised in Toulouse, every two years, a huge exhibition 'FAUST' (Forum des Arts et Technologies du Futur) which was an International Market of Technologies for Creativity and Innovation and aimed to mix new technologies and art.

One can notice that these projects remain close to the traditional know-how of the city which is based on high technologies and engineering sciences. This could however offer new opportunities for creative professionals who plead for an international openness of the city and a better recognition of their activities. It is though too early to assess how the economy and the innovation system can transform and renew themselves to meet the demands of the future. What our surveys reveal is that potential contribution of human and social sciences and the cultural assets of the city should be better taken into account for its further development.

Figure 4.2 - S.W.O.T analysis: Toulouse's challenges in terms of competitiveness and attractiveness

Strengths	Weaknesses
- A steady economic growth in the Midi-Pyrénées region, the département of Haute Garonne being the driving force of this growth **Economic fabric** - Expanding sectors (aeronautics and space) contributing to the international influence - A high rate of higher metropolitan employment compared to other French agglomerations, especially in the research and computer sectors - A favourable regional environment, in terms of international trade, value (capital goods – aeronautics and space) and FDI (4th rank of the French regions) - Increasing support to a strategic vision of development and to the chosen niches ("Aerospace valley", "Cancer-Bio-Santé", Agrimip Innovation) **Education** - A critical mass of students and researchers - A diversified offer in education allowing to respond to the students' needs and to have a qualified labour force - An acknowledged scientific potential, associating research and teaching institutions - Dominance of universities and strong presence of engineers schools - A specialised scientific potential in innovating sectors but also open to general fields - An intense scientific production, especially in the universe sciences. **Innovation, creation and diffusion of knowledge** - A good national and European positioning, regarding innovation criteria, mainly due to the presence of large companies and the global expenditures in R&D - Strategic technologic and scientific competences clearly identified (computer, biotechnologies, nanotechnologies), developed and renown at the international level, relying on excellence poles of education and research and public-private partnerships - A dynamic participation to Framework programmes and numerous international cooperations - Growing reputation of innovating Small and medium enterprises. - Several partnerships (clubs of firms, firms nurseries)	- Increasing of richness inequalities **Economic fabric** - Not significant financial market in France and Europe - Fragility of an economy relying on global companies (Airbus and subcontracting firms) - Weak anticipation regarding key competences in the future (creative industries, sustainable development) - Business real estate: few business centres and lack of upscale sites matching international standards **Education** - A plurality of structures which do not strongly cooperate - A bad positioning of the Toulouse universities in international rankings - An accommodation level of foreign students lower than the ones observed at the national level **Innovation, creation and diffusion of knowledge** - Global expenditures in R&D mostly concentrated in a low number of activity branches - Numerous scientific competences that do not result in technological innovation (weak reactivity of the research towards the markets) - Difficulties of SMEs to integrate innovation (do not catch the available opportunities) - Still insufficient cooperations between economic actors and between firms and research laboratories (weak using of the regional centres for innovation and technology transfer – CRITT and others)
Opportunities	**Threats**
- Increasing impact of globalisation (opportunities with eastern and central European countries, Asia) - Mutation of the production capacity allowing a reorganisation and a diversification of the local system of competence - Skilled labour force, numerous and young, linked to a performing education system - Strong bases for innovation (knowledge and know-how) - Toulouse Research and Teaching Pole (PRES Toulouse), two advanced thematic research network (RTRA) - European and national and regional policies which support the structuring projects of territories and socio-economic stakeholders - Local systems of competences, clusters - Strong bases for the development of the new economy (strong knowledge intensive profile), and response to the new needs of emergent strategic sectors (creative industries, sustainable development, citizen economy)	- Increasing impact of globalisation (international competition, pressure on quality, deadlines, prices) - Uncertainty about the economic environment and its cycles - Attraction policies turned towards advantages in terms of tax and real estate that can lead to a nomadism of companies - Strong dependence to external contractors - A dispersion of the research structures and a lower visibility of the metropolitan scientific pole - Inadequation between the local secondary and higher education programmes and the needs of companies - A weak clarity and a complexity of the support and transfer system; a lack of continuity in the sectors of activity, a weak international openness of the transfer structures - Excessive valorisation by public policies of some high technology sectors (aeronautics, space, computing) at the expense of more traditional sectors (with strong using of labour force) - Scarcity of natural resources

Adapted from AUAT 2008: 90-91

4.4 Position of the city-region with regards hard and soft factors, existing policies/ projects enhancing different hard and soft location factors in the individual city

This section focuses on the key location factors that play an important role in attracting or retaining creative and knowledge intensive people in Toulouse:

– Positive location factors (strong): education and study; quality of the environment; geographical dimensions, location; every day life
– Negative location factors (weak): cultural milieu; quality of the environment (traffic congestion, insufficient public transportation, air pollution)

4.4.1 Education and study

As described in more details in the WP2 report (Peyroux, E., D. Eckert & C. Thouzellier (eds), 2007), the UAT attracts a critical mass of students who benefit from numerous and diversified higher education opportunities. This diversity in education and study allows meeting student needs and subsequently provides the local and regional labour market with a highly qualified workforce. Scientific and technological competencies are clearly identified and internationally acknowledged in Toulouse, not only in the field of education but also in research and R&D activities that are supported by public polices and public private partnerships.

With more than 100,000 students registered in higher education institutions in the Midi-Pyrénées Region the UAT ranks third in France behind the Paris and Lyon Regions, and second if only considering the 'province' (the regions outside Paris). Toulouse has a high number of higher education and research institutions with a great variety of types of institutions and courses of study. The AUT is structured around three universities and 12 engineering schools in addition to other technological institutes. The academy of Toulouse has 19 PhD graduates schools (this is more than Lyon, Grenoble and Montpellier). It ranks third in France in terms of the number of doctorates successfully accomplished compared to the regional population. Toulouse also offers 27 professional Bachelors (AUAT, 2008: 81).

The Midi-Pyrénées Region is among the four regions in France that have the highest number of researchers in Public Scientific and Technological Institutions (EPST) - such as the National Centre for Scientific Research (CNRS), the National Institute for Agricultural Research (INRA) or the National Institute for Health and Medical Research (INSERM) - or in Public Industrial and Commercial Institutions (EPIC) such as the National Centre for Space Studies (CNES), National Aerospace Research Center (ONERA) (the three other Regions being Île-de-France around Paris, Rhône-Alpes around Lyon and PACA around Aix-Marseille). Between 1992 and 2002 the evolution of the number of researchers in Midi-Pyrénées has been among the highest in France (+23 per cent).

Whereas the share of public research in Midi-Pyrénées is 55 per cent compared to 50 per cent at national level this share remains below the figures observed in other regions such as Languedoc-Roussillon (79.7 per cent), Nord-Pas-de-Calais (71.2 per cent) or Corsica (96.3

per cent). The private sector therefore also contributes to the research potential. Public research in Toulouse is closely linked to the universities and concentrates in the Toulouse agglomeration. It is structured around 'excellence poles' such as Paul Sabatier campus, the Institute for Human and Social Sciences in Le Mirail, the hospital centres of Purpan and Rangueil… As a result there is an acknowledged scientific potential bringing together research and higher education institutions.

The position of Toulouse in South-Western Europe facilitates the relationships with Maghreb and Spain (in 2005, 31 per cent of the foreign students in Midi-Pyrénées came from Maghreb and 10.5 per cent from Western Africa; a majority of foreign students came from Europe, in particular Spain, Germany and Italy) (AUAT, 2008: 85).

The Toulouse agglomeration concentrates most of the course of studies and the institutions but higher education and research functions are progressively developed by middle size cities such as Albi, Auch, Foix and Pamiers, which attract more and more students, in particular Albi (AUAT, 2008: 56).

However a number of challenges and weaknesses have been identified in the area of higher education (AUAT, 2008).

The evolution of the number of students over the 2001-2004 period shows that the UAT only represents 2 per cent of the national increase compared to 8 per cent for Lyon and almost 4.5 per cent for Lille and Bordeaux (AUAT, 2008: 56).

The share of foreign students is lowest than the national level and lowest compared to other bordering regions such as Alsace, Provence-Alpes-Côte d'Azur, Rhône-Alpes). Over 1.000 foreign students, 85 come from foreign countries compared to 86 at national level (AUAT, 2008: 85).

The diversity of institutions in Toulouse makes the international scientific and academic cooperation complex and harms the European and international visibility of the metropolitan area (AUAT, 2008: 55).

There is a diversity of structures with little cooperation. There is a strong dependency towards Toulouse despite decentralisation trends. There is a strong concentration of public research in the heart of Toulouse with little spatial diffusion.

According to the Shanghai ranking the University Paul Sabatier (UT3) has declined over the past years and is positioned far behind American and Anglo-Saxon universities. UT3 also ranks behind other French universities such as Grenoble, Bordeaux, Montpellier and Toulouse.

A series of policies and measures have been implemented over the past years to address some of these weaknesses, in particular to create more synergies and cooperation within the scientific milieu and to support a higher international visibility.

Following national reforms in the higher education system, in particular the 2006 Law of Orientation and Programming of Research ('Pact for Research') the creation of the Toulouse Research and Teaching Pole (PRES Toulouse) aims at federating a number of universities and

institutes in sciences, health, human and social sciences and at coordinating the activities related to the PhD training (with the creation of single doctorate under the label 'University of Toulouse') and the management of equipment and infrastructures. The creation of a digital university is also planned. The creation of networks of scientific excellence (advanced thematic research network - RTRA) such as 'Toulouse Economic Sciences' and 'Sciences and Techniques for Aeronautics and Space' has been financed by the State. They aim at supporting closer relationships between stakeholders within the scientific milieu and at increasing the attractivity of the French higher education and research system.

4.4.2 *Quality of the environment*

Transport and mobility
Toulouse has a number of advantages with regards to transport that includes a road network that is less saturated and less generator of noise that other European metropolitan areas; a road network that easily links the Atlantic coast, the Mediterranean region and the Paris region; an ambitious policy towards regional trains (TER) and a performing airport currently being extended (the 4th in France in terms of number of passengers and the 1st in terms of fret) that plays an important role in current and future development as Toulouse is not located in a major European route be it by train or road (AUAT, 2008, p. 31).

However Toulouse still displays a number of weaknesses:

- A relative isolation from major European fret and passengers' exchanges due to physical constraints (Pyrénées mountains and Massif Central),
- A limited train accessibility due to delays in building High-Speed Railway Lines (LGV) (line to Paris expected in 2016),
- High disparity of accessibility in road and trains across the AUAT,
- The airport not linked with public transport, except for the city of Toulouse,
- There is limited intermodal transportation within the AUAT,
- There are disparities in terms of accessibility within the AUAT whereas economic, scientific and cultural activities developed according to a polycentric model.

Furthermore the economic attractivity of Toulouse along with urban sprawl lead to overcrowded transport and weaken the integration of middle size cities. The impact of energy costs (related to air and road transport) is also a major issue.

The policies adopted by the City of Toulouse through the Plan for Urban Journeys (PDU) approved in 2001 in line with the Master Plan has set up a number of objectives among which (Mairie de Toulouse, 2008a):

- The decrease in car traffic together with the sharing of roads with other means of transport and a better management of parking places,
- The development of public transport (metro, bus, train) and the search for a better balance between the various transport modes, in particular through the support to bicycle and pedestrian movements,

- The conservation of the environment and the quality of the living environment by reducing 'annoyances' (air pollution, noise annoyances, space consumption for parking) that are often linked to the use of private cars,
- The fight against social exclusion by supporting en equitable access to urban services in order to guarantee solidarity within the UAT,
- Promoting less polluting public modes of transport.

Air pollution

The Toulouse agglomeration is mainly concerned with pollution generated by human activities (through housing, transports, heating, factories…). Air pollution includes traditional proximity pollution through airborne pollutants such as nitrogen (NO_2), sulphur (SO_2), ozone (O_3), carbon dioxide (CO_2), lead and particles ($PM10$), as well as long distance and planetary pollution. According to the Regional Plan for the Quality of Air (PRQA), transports constitute the first source of pollution (61 per cent of the emissions of NO and 63 per cent of the emission of CO). Although the manufacturing sector has significantly reduced its levels of SO_2 emissions over the past years it remains the main source of SO_2 emissions (62 per cent) (Mairie de Toulouse, 2008a).

Exceedance in NO_2 has been observed in 2006 in a number of streets located in the inner city of Toulouse and in one of the beltways. In 2007 however the average annual concentration remained below the allowable emission threshold. Concentration in SO_2 in Toulouse remains below the limits set up for health and environment protection and air quality. Daily pollution peaks in particles are being regularly registered in the inner city of Toulouse but as the regulation only considers thresholds based on annual averages there has been no registered exceedance. Ozone peaks in the city of Toulouse are less frequent than in other European cities due to its geographical position (cf. winds, distance from national and trans-boundary pollution). Regarding the general quality of air in Toulouse (including NOx, SO_2, O_3 and $PM10$) there is a predominance of level 3 (good quality of air), 4 and 5 (average quality) except during the 2003 heatwave (Mairie de Toulouse, 2008a).

It is estimated that emissions generated by transport vehicles will increase within 2020. The urban model promoted by the Charter for the Urban Area (Charte Aire Urbaine) should limit such emissions of CO_2 but their effects will be insufficient unless an ambitious transport policy is being implemented (AUAT, 2008).

In order to address these environmental concerns specific regulations have been developed at local and regional level following the adoption of national laws, in particular the 1996 Law on Air and the Rational Use of Energy – LAURE, and more recently the law 'Grenelle 1' of 2009 which set up principles for the development of new policies aiming at a better protection of environment, energy savings and the fight against climate warning.

All agglomerations of more than 250.000 inhabitants are required by the LAURE to elaborate a Plan for the Atmospheric Protection (PPA), which proposes a number of measures aiming at maintaining concentrations of pollutants below the thresholds and at defining a warning procedure in case of exceedance. In Toulouse the PPA covers the agglomeration and the suburbs (109 communes altogether also corresponding to the perimeter of the PDU). It has been approved by the Préfet (the State representative) in 2006 and establishes the measures

that have to be taken by the relevant authority to reduce pollution as well as emergency measures to implement when warning or information thresholds have been reached. Such measures include the reduction of car speed on beltways, a turnover of private and public cars in order to introduce less pollutants vehicles, an improvement in construction materials that allows reducing emissions of air pollutants. The revision of the Plan for Urban Journeys since 2008 has been conducted along the same lines.

In 2004, the City of Toulouse has set up an Observatory of Environment. This is meant as a tool for information and awareness. It has about 50 indicators structured around nine topics: air, refuse, journeys/ transport, water, energy, sounding environment, natural legacy, risks, soils and sub-soils (http://www.toulouse.fr/web/guest/cadre-vie/observatoire-environnement-2008). The City has in particular demonstrates the will to master energy consumptions, develop renewable energies (solar energy, wind turbines) and improve the quality of air.

The City of Toulouse has also launched its own Territorial Climat Plan in 2009 and made a commitment to reduce its energy consumption and its greenhouse gas emissions. http://www.toulouse.fr/web/guest/cadre-vie/plan-climat (Mairie de Toulouse, 2008a).

In addition to new regulations neighbourhoods and local authorities take voluntary initiatives. A number of neighbourhoods have integrated environmental concerns into their specifications. A rising numbers of local authorities have elaborated an Agenda 21 as well as action plans to promote a sustainable environment.

A Regional Plan for the Quality of Air (PRQA) has also been adopted in Midi-Pyrénées in 2000. It established middle and long-term orientations that aimed at preventing or reducing airborne pollution in order to reach the levels of quality defined in this Policy document. Regional Councils are responsible for their revision every five years (AUAT, 2009).

Noise annoyance
The main contributor to environmental noise (defined as outdoor human-generated sound that can be heard in domestic environments), is transportation, particularly road and air traffic. Following national recommendations a series of measures have been taken at local level such as the classification of noisy roads in order to determine the minimum acoustic performance of future adjacent buildings as well as the elaboration of Noise Exposure Plans (PEB) in communes located near airports which set up conditions and restrictions for the land use in neighbourhoods exposed to the noise.

Green spaces and public parks
Green space and public parks make an essential contribution to the quality of life of urban citizens. In Toulouse the development of small nearby public green areas has mainly taken place in the 1980's and the 1990's. Today a majority of the city population live within a 500 metres distance from a public green public space (places and public gardens) (Mairie de Toulouse, 2008s). Extensive parks (>10 ha) have been developed in the outskirts of the city (La Ramée, Pech David, Sesquières, Les Argoulets).

The City has developed an ambitious plan aiming at developing the revegetation of the urban territory, at providing a maximum number of inhabitants with a pedestrian access to public green spaces and at promoting an uninterrupted network of paths between the neighbourhoods and the large public parks. The green network of Toulouse, which is 163 km long, has been regularly extended since 1993 with the adoption of a 'Green Plan'. It is based on the hydrographical network of the city and has led to many developments (Garonne, the Touch, the channels and Négogousse). Two new 'Nature Spaces' (Marcaisonne and Ramier) are currently under realisation and two other studies are currently being undertaken (Garonne et Gabardie). The policies of the city also include measures to protect the local fauna and flora that are mainly linked the hydrographic network. A number of Natural Zone of Ecological, Faunistic and Floristic Interest (ZNIEFF) and a Community Zone for Birds (ZICO) have been established. The network 'NATURA 2000' is being progressively put in place (AUAT, 2008a).

4.4.3 Cultural milieu

Toulouse enjoys a patrimonial diversity in terms of both urban and rural landscapes (roman churches, abbeys, canal du Midi, etc.). Cultural legacy in the city of Toulouse includes classified and registered monuments (200 in Toulouse). There are seven museums including national museums, a national theatre (TNT), a national orchestra, the Capitole Theatre, a centre for contemporary art (les Abattoirs) and other venues dedicated to live entertainment. 130 festivals per year are taking place in the Midi-Pyrénées region.

In recent years the regional capital has taken its own initiatives: the Museum Les Abattoirs (modern and contemporary art) was opened; the festival Printemps de Cahors (held in the Lot département) was transferred to Toulouse and was turned into Printemps de Septembre. State subsidies for plastic art remained constant and demonstrated State support. Local authorities are more and more involved in this sector. Under the leadership of the State, contemporary art has now supplanted traditional art in terms of legitimacy. Local authorities are invited to be more involved in art but their representatives have few qualifications in the field. Their actions also have to be approved by a local population that demonstrates little interest in art. For all these reasons their support for innovative art expressions remains limited.

Art events organised in Toulouse now enjoy high visibility and attract steadily increasing audiences. But what we are witnessing is more the diffusion of an international art that attracts media attention than the valorisation of local creation. Artists from the advanced sectors are still leaving the region. Low levels of organisation of the cultural sector and an under-estimation of the economic dimension of cultural sector have also been pointed out (AUAT, 2008a).

The change of leadership in 2007, which brings into power the left-wing candidate, has brought up a new ambitious cultural policy and a new discourse about the role of culture in urban and social development as written in a document, *Cultural project for Toulouse 2009-2014* (Mairie de Toulouse 2008b). The emphasis is put on 'a solidarity metropolis' with an 'equitable cultural policy' entrenched in the city's life and close to the citizens. Projects include the rehabilitation or the construction of new proximity infrastructures, in particular in

the suburbs, a financial and material support to artists, in particular promoting cultural plurality and interculturality, and a support to the development of creative industries (cinema, edition, music, audiovisual, multimedia, but also digital art, design, craft, popular art, architecture, urbanism and gastronomy). The creative industries are considered in terms of their economic and social impacts (as part of urban renewal policies and as the promotion of local identities). The cultural policy also acknowledges the need to strengthen the international dimension of Toulouse and to reinforce cooperation with European countries. Toulouse intends to integrate the network of creative cities initiated by UNESCO.

The cultural policy also includes the promotion of the scientific and technical culture with the creation of a 'Science neighbourhood' (Quartier des sciences), the organisation of 'an international week of innovation' and the development of digital projects within the city (data digitalisation, creation of collaborative Internet platform, etc.).

5 CONCLUSIONS

5.1 Overall evaluation of the city-region

The city of Toulouse (437,000 inhabitants in 2006) is the driving force of an important sprawling urban area (342 communes, 1.1 million inhabitants, around 4,000 km^2).

The Urban Area of Toulouse (UAT) enjoys the highest net migration in France, with 20,000 extra inhabitants per year since the 1990s (the annual growth rate of the UAT is even increasing in the 1999-2007 period, reaching 1.9 per cent compared to 1.6 per cent between 1990 and 1999). The new comers are rather young: considering the reference person, 65 per cent of the new households are under 30 years old and one third of them are students, living mostly alone. The Toulouse new comers also have higher education levels than those settling in the rest of the region. Half of them have studied at least two years after the A-Level or are top executives. A majority of them (70 per cent) comes from outside the Midi-Pyrénées region. Excluding the students, one household out of two has moved for professional reasons.

This confirms the position of Toulouse as a major pole in France (after Paris and Lyon) for research, education and employment opportunities. Strengths of the city rely on the development of a consistent local system of competences in aeronautics and space activities, as well as computer industry and electronics. The city's dynamic is also supported by another competitive cluster, dedicated to the medical, pharmaceutical and biotechnology research.

Observed tendencies from the first ACRE surveys (WP5 and WP6) tally previously acquired results in studies on Toulouse (Grossetti, 1991, 2002, 2006). The main factors that explain the concentration of people composing the 'creative classes' in Toulouse are first of all trajectory factors – being born or having studied in the region -, and then job market related factors. Soft factors only play a very marginal role and those coming to the fore are linked to the proximity of a rural environment and to the image of overall friendliness that the city enjoys.

The 'higher education factor' also plays a great role in the reasons of transnational migrants to come to Toulouse (WP7). Most of the knowledge foreigners have had an experience with engineering schools or universities either as student or employee. Creative workers also massively come to study in France, but their choice of Toulouse is more driven by the existence of social links.

If soft factors are not overwhelming in attracting a person to a city, they could however act as drivers to decide staying in or leaving a city. This idea was confirmed by deeper analyses of the WP5 data on 11 selected cities (Martin-Brelot *et al.*, 2009). We found out that soft factors tend to have more importance if respondents are living in the city for more than one year. As an opposite the role of hard factors is continuously decreasing with the time spent in the city. This result also implies that hard factors work more as a reason for mobility (why to come), whereas soft factors are more the reason to stay (why not leaving the city).

5.2   Reflection on existing literature

Richard Florida's hypotheses prove difficult to apply in the case of Toulouse because they rely on the idea that people choose individually and thoughtfully their place to live in, whereas in the studies we have conducted, this situation appears relatively seldom regarding inertia or constraint effects linked to the past trajectory of people. Most of the time, interviewees have not chosen to live and work in Toulouse, putting the city in balance with others. This choice is in keeping with the continuity of situations, relations and involvements of any kind. The decision has often not been taken individually but as a conciliation between several involved people.

Another idea that came up after analysing the results of the different survey is the importance of soft factors as location factors inside the UAT, i.e. at the urban scale. This would be more in line with the concept of 'scene' developed by Clark (2004). Considering the growing interconnections between work and leisure, Clark considers as relevant communities' attitudes and values, the character of places and the identity of individuals, which all contribute to different conceptions of the 'quality of life'. The concept of 'scene' as an element of urban or neighbourhood's life brings dimensions of citizenship, individual participation and 'self-generated bottom up rather than top down politics' into focus. Quality and context are also present in this approach, as amenities are considered as an addition to land, labour, capital, and human capital.

This was partly confirmed by the preference of managers in the creative sectors to locate in the city centre. Entrepreneurs give different kinds of arguments that result from a mix of practical and symbolic values. For instance, they argue that accessibility through public transports, walk or bicycle is better for the environment protection. The image given to clients is also one significant reason to settle in the centre, especially when they come from outside the region or from a foreign country. The metropolis is supposed to offer a quantity and diversity of sociability places like restaurants, pubs, nightclubs, theatres, museums, and opportunities of regular events like festivals. It is also important that the image of the neighbourhood matches the image of the sector i.e. an image of cultural and artistic effervescence. The urban environment as a source of inspiration is also mentioned directly or indirectly by some managers.

5.3   Reflection on existing local development strategies and policies

The high degree of attractiveness of the metropolitan region is mainly due to a solid knowledge-based economy built over the 20th century. The aim of local policies is less to reinvent a city development model than to transform the current advantages on the long term for the benefit of the highest number of people (Peyroux *et al.*, 2007). Like many other European metropolises, Toulouse has to address the tension between economic competitiveness and social cohesion. Cultural elements are increasingly present in the planification debates, and more attention is paid to the so-called 'soft' factors, but some crucial planning issues still concern infrastructural aspects, such as the improvement of the transport networks region and nation-wide. As a consequence, the recently elected left-wing

municipality has engaged in the enhancement of the intercommunal structure of Toulouse. The declared ambition is to harmonise strategies of economic development and urban planning so that the city becomes a European metropolis. The priority of the new institution (Communauté urbaine du Grand Toulouse) relates to the transport issue. On the whole, 80 million euros should be devoted to improve the system of public transport (Mairie de Toulouse, 2009a: 8).

During 2009, the municipality launched consultation workshops about urban projects for the Great Toulouse 2030 (Mairie de Toulouse, AUAT, 2009b). This has been done firstly with professionals (architects, urban planners, real estate developers) and secondly with inhabitants. The idea is to think in their globality the consistent development of five 'territories':

- *'the metropolis'*, which implies to think about the integration of a future high speed train station, the connection to airports, the exhibition park, the pole dedicated to research on cancer treatments (Canceropôle)
- *'the cultural city'*, which includes several cultural sites around the Garonne river (Arc culturel Garonne) and outside the city core in the area of Le Mirail. The municipality is also exploring the opportunity to create a neighbourhood dedicated to cinema, gathering a film library and specialised establishments such as the Higher school for audiovisual (ESAV).
- *'the campus city'* which aims at enhancing the international visibility of infrastructures dedicated to higher education and research.
- *'the renewed city'* plans the restructuring of the neighbourhoods and the research of a better urban balance. The aim is to 'build' Toulouse on itself' after many years of urban sprawl, by using the urban areas that have to be restructured. The main areas concerned are the northern entry of Toulouse, the left side of the Garonne River with the development of an ecological neighbourhood (Cartoucherie). The deprived areas should be integrated and better connected to the adjacent territories. The area of the main train station (Matabiau) is supposed to be restructured and transformed into a large business centre.
- *'the water city'* aims at giving value to the numerous water-based and green areas that are present in Toulouse and to the Garonne river and the 'Canal du Midi' which are two major waterways.

5.4   Possible recommendations

Local economic strategies, implemented by different stakeholders at different scales, point towards the search for national and international competitiveness through promoting centres of excellence. This vision of excellence is driven by high technology, in which highly qualified human capital plays a key role (Peyroux *et al.*, 2007). Recently, several national or international projects have contributed to increase the city's renown, such as the European Cancéropôle and Galileo.

However, Toulouse is socially diversified: intermediary professions and executives are strongly present (48 per cent of the working population), but this is also a city where many employees and blue-collar workers are to be found (46 per cent of the working population). Thus one important task of the leaders is to deal with the issue of the professional integration of low or unqualified populations in a highly specialised urban area.

The surveys we conducted in Toulouse revealed some dissatisfaction with the city. Some discontents or worries expressed by creative and knowledge professionals are not different than those of the rest of the population. They relate to **transport issues**, such as the bad connections between the centre and the periphery, the growing roads congestion and all kind of pollutions the use of car might entail (e.g. air pollution, noise, stress, loss of time). As we saw above in this text, these questions are being addressed by the current municipality.

Another issue that has been raised by our interviewees, especially the sample of former graduates and employees (WP5) is linked to the general cost of living in the city and in particular the **dwelling** which is considered too expensive. In 2009, one objective of the city council is to devote 19 million euros for the building of 4,500 social housings within the next three years (Mairie de Toulouse, 2009c: 18). However we cannot be certain that the creative knowledge workers will benefit from this kind of measure which applies uppermost to the most deprived.

These observations suggest that local authorities should above all improve the general level of urban amenities without taking a particular target group, namely 'the elite' composed by high-skilled workers into consideration. Indeed, we saw that creative and knowledge highly skilled employees, but also managers were quite strongly embedded in their native region or in the city where they have graduated. They feel concerned about the evolution of urban organisation, especially transport and dwelling issues, but also about **job insecurity** and the increasing precariousness which is visible in every city.

Besides, our surveys and the analysis we made about the differences between the target groups (employees, managers, transnational migrants) and inside each of them (people working either in the creative or the knowledge sectors) enabled us to confirm a kind of unbalance in the development of the metropolis. This is closely related to the historical development pathway of Toulouse, which was essentially knowledge driven and led to a specialisation in high technologies and engineering sciences. As a result, creative and cultural industries are not well represented in a city that remains 'small-sized' regarding several aspects of the contemporary urban development.

On the one hand, many efforts have been done since the 1970s to accommodate companies and employees from electronics, space and aeronautics industries. Research and higher education establishments, business parks, clusters, offices, dwellings and neighbourhoods at certain location of the urban area (south-east and north-west mainly) match the needs of employees and managers in the knowledge sectors. On the other hand, managers in creative industries voice the need for a change in the mindset of local leaders. Indeed, compared to knowledge intensive industries, professions related to culture, arts or entertainment appear to suffer from a lack of recognition, which could play against the attractiveness of the city in the longer term. The cultural project designed for 2009-2014 insists on the promotion of creative

industries as well as on a more equitable meshing of cultural resources on the whole territory. However, we could notice that an important critic related the **lack of international influence** and more generally a **lack of ambition of the city**.

This has been underlined by managers (WP6) who often referred to Paris spontaneously, but also to Barcelona or even Marseille and Nantes for the vibrant atmosphere and artistic effervescence that are not to be found in Toulouse. Even if it has nearly 12 per cent of foreign population on its ground, Toulouse is not known abroad. The transnational migrants interviewed within Work Package 7 were not attracted by the city itself. This is proved by the high number of respondents who did not know anything before coming in the city. Even those who had heard about it for the specialisations in aeronautics and space, did not know much about the city. This last study revealed a gap between the image of associated to the 'Europe's capital of aerospace industry' and the medium size of the city.

These observations can be related to the **difficult relationship to public institutions** that many interviewees have mentioned especially in the creative sectors. The issue of the complicated relations to administrative public services has been raised both by the managers (WP6) and by the international migrants (WP7) for different reasons.

Managers

Web design, electronic publishing and computer games are characterised by a high degree of flexibility regarding clients and employment. This flexibility encounters heaviness of public administrations and complicated access to public markets. This is pointed out in many cases, especially by the smallest enterprises. On the whole, complexity and heaviness of relations with public institutions are underlined as weakness, especially when these ones are the clients of the interviewed companies. Some just gave up the idea of working with the public administration because they actually felt more pressure than pleasure in their work.

Migrants

Almost all the interviewees severely criticise the administrative processes to obtain resident permits, both because they find it unnecessary long and complicated and especially because they sometimes really felt racist behaviours toward other migrants in the Préfecture services. The issue of equivalences of diploma should also be addressed seriously.

Suggestions made by interviewed highly skilled foreign migrants in this study revolve around the improvement of information processes. This concerns explanations at the arrival in the city and later on, to search for activities, jobs, etc. Here again, the observations point out the inadequacy between the growing size of the city, becoming 'international', and the level of services provided.

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Table 3.5A - Knowledge workers: Overall concerns on the major problems of the city (per cent)

	Very worried	Somewhat worried	Not particularly worried	Not worried	Not worried at all	Don't know	Total
Crime	6.7	26.7	45.3	8	8	5.3	100.0
Safety	5.3	36	37.3	16.0	5.3	0	100.0
Recreation for teenagers	1.3	12	29.3	26.7	4	26.7	100.0
Affordable housing	20	50.7	14.7	8	4	2.7	100.0
Recreation for seniors	1.4	6.8	33.8	17.6	6.8	33.8	100.0
Availability of jobs	10.7	37.3	34.7	10.7	2.7	4	100.0
Availability of public transportation	6.7	20	48	17.3	8	0	100.0
Recreation for children	2.7	6.7	29.3	24	10.7	26.7	100.0
Graffiti	8	26.7	29.3	22.7	6.7	6.7	100.0
Drug	14.7	28	30.7	13.3	5.3	8	100.0
Homelessness	17.3	54.7	20	4	2.7	1.3	100.0
Anti social behaviour	21.3	32	37.3	8	1.3	0	100.0
Prostitution	6.7	25.3	38.7	13.3	10.7	5.3	100.0
Traffic	29.3	50.7	14.7	4	1.3	0	100.0
Air pollution	16	50.7	22.7	5.3	1.3	4	100.0
Demonstrations	0	13.3	40	21.3	10.7	14.7	100.0

Table 3.6A - Creative workers: Overall concerns on the major problems of the city (per cent)

	Very worried	Somewhat worried	Not particularly worried	Not worried	Not worried at all	Don't know	Total
Crime	5.3	18.7	49.3	10.7	13.3	2.7	100.0
Safety	5.3	18.7	49.3	10.7	14.7	1.3	100.0
Recreation for teenagers	4	8	36	21.3	8	22.7	100.0
Affordable housing	17.3	45.3	12	12	1.3	12	100.0
Recreation for seniors	2.7	4	22.7	29.3	8	33.3	100.0
Availability of jobs	13.3	40	30.7	8	5.3	2.7	100.0
Availability of public transportation	2.7	28	34.7	26.7	4	4	100.0
Recreation for children	1.3	6.7	41.3	20	5.3	25.3	100.0
Graffiti	4	16	38.7	21.3	14.7	5.3	100.0
Drug	8	26.7	33.3	18.7	5.3	8	100.0
Homelessness	18.7	52	22.7	1.3	1.3	4	100.0
Anti social behaviour	9.3	32	40	8	5.3	5.3	100.0
Prostitution	4	17.3	40	20	5.3	13.3	100.0
Traffic	26.7	46.7	17.3	5.3	2.7	1.3	100.0
Air pollution	12	58.7	22.7	2.7	0	4	100.0
Demonstrations	2.7	6.7	41.3	16	10.7	22.7	100.0

Table 3.7A - Graduates: Overall concerns on the major problems of the city (per cent)

	Very worried	Somewhat worried	Not particularly worried	Not worried	Not worried at all	Don't know	Total
Crime	0	24	38	22	14	2	100.0
Safety	0	24	40	24	10	2	100.0
Recreation for teenagers	2	16	38	24	4	16	100.0
Affordable housing	30	48	6	12	2	2	100.0
Recreation for seniors	2	2	32	22	8	34	100.0
Availability of jobs	8	50	22	10	2	8	100.0
Availability of public transportation	6	22	38	22	8	4	100.0
Recreation for children	2	12	28	22	10	26	100.0
Graffiti	2	16	34	26	18	4	100.0
Drug	10	24	40	20	2	4	100.0
Homelessness	18	54	14	4	2	8	100.0
Anti social behaviour	10	36	44	10	0	0	100.0
Prostitution	2	18	40	18	12	10	100.0
Traffic	30	38	28	4	0	0	100.0
Air pollution	24	50	20	4	0	2	100.0
Demonstrations	0	10	32	26	18	14	100.0