



**HAL**  
open science

## The Impacts of public transport policies on a non mobility area: French study case in the north of France

Aurélie Mahieux, Lucia Mejia-Dorantes

### ► To cite this version:

Aurélie Mahieux, Lucia Mejia-Dorantes. The Impacts of public transport policies on a non mobility area: French study case in the north of France. 2013. hal-01006684

**HAL Id: hal-01006684**

**<https://hal.univ-lille.fr/hal-01006684>**

Preprint submitted on 16 Jun 2014

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Lille 1 | Lille 2 | Lille 3 |

# Document de travail

■ [2013-35]

*“The Impacts of public transport policies on a non mobility area: French study case in the north of France”*

Aurélie Mahieux and Lucia Mejia-Dorantes



Université Lille Nord de France

Pôle de Recherche  
et d'Enseignement Supérieur



Université Lille 2  
Droit et Santé



# “The Impacts of public transport policies on a non mobility area: French study case in the north of France”

*Aurélie Mahieux and Lucia Mejia-Dorantes*

*Aurélie Mahieux*

PRES Université Lille Nord de France, Université Lille 1, Laboratoire EQUIPPE, EA 4018, Villeneuve d'Ascq, France -  
IFSTTAR AME DEST

[aurelie.mahieux@ed.univ-lille1.fr](mailto:aurelie.mahieux@ed.univ-lille1.fr)

*Lucia Mejia-Dorantes*

Fraunhofer Institut für System und Innovationsforschung ISI  
Breslauer Strasse 48 - 76139 Karlsruhe, Germany

[lucia.mejia-dorantes@isi.fraunhofer.de](mailto:lucia.mejia-dorantes@isi.fraunhofer.de)

1 **THE IMPACTS OF PUBLIC TRANSPORT POLICIES ON A NON MOBILITY**  
2 **AREA: FRENCH STUDY CASE IN THE NORTH OF FRANCE**

3

4 **Aurélie Mahieux (corresponding author)**

5 **University of Lille 1 – EQUIPPE and IFSTTAR AME DEST**

6 **Faculté des Sciences Economiques et Sociales**

7 **Bât Sh2 - Cité scientifique**

8 **59655 Villeneuve d'Ascq Cedex, France**

9 **E-mail: aurelie.mahieux@ed.univ-lille1.fr**

10

11 **Lucia Mejia-Dorantes**

12 **Fraunhofer Institut für System und Innovationsforschung ISI**

13 **Breslauer Strasse 48**

14 **76139 Karlsruhe, Germany**

15 **E-mail: lucia.mejia-dorantes@isi.fraunhofer.de**

16 **ABSTRACT**

17 Many regeneration projects aim at producing a benefit of the population around them.  
18 However, it may happen that the socio-economic problems and needs of the territory  
19 involved are not completely understood.

20 This paper reports on a case study of the northern part of France, namely *Bassin-Minier*,  
21 which used to be a coal mining area. It is a particular metropolitan area with a specific  
22 geography and spatial distribution, which faces different social problems, along with a  
23 limited public transportation system.

24 Focus groups were used as a methodology to disentangle the transport behaviour,  
25 situation and needs of the people living or working in this specific territory due to the  
26 limited availability of other recent sources of information. We have chosen to focus  
27 specifically on groups with limited availability of transportation or in risk of social  
28 exclusion. This research also aims at contrasting different future and recent transport  
29 and regeneration projects with the population under study, to understand whether these  
30 projects are found beneficial by them.

31 *Keywords: public transportation, private transportation, focus groups, qualitative*  
32 *analysis, household travel survey*

## 33 1. Introduction

34 Although there are many definitions of “urban regeneration”, they basically agree on the  
35 fact that it is a process in which different authorities intend to foster the social and  
36 economic development of a certain region (Couch et al., 2011) by bringing back  
37 economic activity to the area, and by promoting the enhancement of the urban  
38 environment. Our study area is particularly affected by this phenomenon after the  
39 decline and closure of the mining industry in the 80s (Conférence Permanente du Bassin  
40 Minier, 1998). Moreover, it is widely accepted by researchers that transport  
41 disadvantage reduces the opportunities of socio-economic development and may  
42 contribute to social exclusion. Among other factors, the lack of an adequate transport  
43 provision limits the possibilities to access different basic services {Levitas 2007 #288}.

44 During the last years, different policies have been implemented aiming at regenerating  
45 the economic, social and environmental situation of the towns belonging to the *Bassin-*  
46 *Minier*, which is the ex-coal mining area in the top North of France, in the Nord-Pas-de-  
47 Calais Region. For instance, think of the recently opened of the new museum Louvre-  
48 Lens. With regards to transportation, the improvement of public transportation has been  
49 deeply discussed by means of one tramway and one Bus with a High Level of Service  
50 (BHLS) lines. Unfortunately, to understand the mobility patterns of this area the two  
51 only household travel surveys (HTS) available for this region were carried out between  
52 2005 and 2006. In general terms, HTS show that the share of public transportation and  
53 other sustainable modes is very low. This region is recognized to have had many  
54 socioeconomic problems over the last decades. Therefore, one may think that why their  
55 mobility patterns and needs are not well understood.

56 The study of mobility patterns is in general made through different types of surveys,  
57 such as travel and activity diaries, and time-use surveys. However, many researches  
58 have shown the utility of qualitative methods to fill the gap of information, {Jones 2003  
59 #601} even if quantitative and qualitative methods have always faced a division among  
60 researches. In fact, the integration of quantitative and qualitative research has become  
61 more and more common while the utility of both methodologies has been highlighted  
62 (Sale et al., 2002) {Crang 2002 #128} {Bryman 2006 #600} {Zolnik 2009 #499}. There  
63 has always been a debate on the reliability of qualitative methodologies due to the lack  
64 of scientific rigor, however authors such as Clifton and Handy (2003), and Lovejoy and  
65 Handy (2008), expose that qualitative studies elicit important information that cannot be  
66 obtained by quantitative approaches because of the complexity of studying travel  
67 behaviours. In fact, qualitative methodologies may help on the understanding of  
68 quantitative results. Besides, methodologies such as focus groups (FGs), may be useful  
69 to uncover the uncertainties provided by utility models. Lately, interesting qualitative  
70 studies related to transportation have been carried out. For example, Lovejoy and Handy  
71 (2008) used FG to study the transportation problems of Mexican immigrants in  
72 California. By carrying out this study they obtained important information useful for  
73 transport policy. More recently, Lucas (2011) presented the problems of social  
74 exclusion in the Tshwane region of South Africa by using a qualitative methodology.

75 She exposes the problems of low income population and present appropriate solutions  
76 to address their needs.

77 The objective of this paper is threefold: first, it is to show how people in this specific  
78 area in the north of France commute; second, it is to explain their mobility patterns and  
79 needs as a result of historical features and current situation; third, it is to propose  
80 different policy alternatives aiming at reducing their accessibility problems to improve  
81 their social and economic situation, which would contribute to urban regeneration.

82 Herein, we report the answer to questions about the point of view of the population on  
83 the living environment, economic activities, transport, services and opportunities for a  
84 further development. We chose different segments of population like students, retired  
85 people, working population and people in social reintegration. We show that there are  
86 important differences in mobility behaviours and patterns which depend on age of  
87 population and urban form. The methodology of the FGs helps to fill the gap over  
88 uncertainties provided by quantitative analyses and to explain results provided by the  
89 two available HTS. It proves to be an important tool for a better understanding of  
90 mobility behaviour and finally, it helps to evaluate transport services and to better  
91 comprehend the variables which influence the location of inhabitants.

92 This paper is divided into 6 sections. After this introduction, section 2 describes the  
93 study area, past and present trends. Section 3 presents the methodology of this study  
94 along with the sample. Afterwards, section 4 discusses the main findings of the several  
95 FGs conducted. Finally section 5 suggests some policy implications and presents the  
96 conclusions.

## 97 **2. Overview of the case study area**

98 In general, the Nord-Pas-de-Calais region, in the north of France, is a very interesting  
99 case study. Located in the heart of Europe, the crossroad of three main European  
100 capitals (Paris, Brussels and London), it is benefited by an excellent geographical  
101 situation with many different transport infrastructures, such as highways, neighbouring  
102 waterways, high speed rail, and dense rail networks. However, these infrastructures  
103 have not been enough to promote integration and development. As mentioned by  
104 different authors {Di Ciommo 2006 #606} {Laigle 12/2007 #607} different problems  
105 related to socio-spatial cohesion still remain. The socio-professional characteristics of  
106 the population show the industrial past of the region with only 12.2% of employees in  
107 skilled or intellectual jobs in 2006. This area has not really recovered from the past  
108 social and economic crises and it is still an area that concentrates different problems  
109 such as high mortality, scholar abandon, and unemployment.

110 As explained by Couch {Couch 2011 #588} the conurbations of Lille experienced  
111 already in the 50s and 60s a decline of the textile industry, and years later it took the  
112 turn to the mining industry. The coal mining industry officially finished its activities in  
113 1990 and since then, it has been a territory under regeneration. In general terms it was  
114 expected that tertiary sector jobs would take the lead in economic development.

115 Many different measures have been taken as urban regeneration initiatives. As an  
116 example, in 2002, the French Government decided to promote the development of  
117 Lyon, Lille and Marseille into European cities {Couch 2011 #588}. More recently, the  
118 inauguration of the museum of Louvre-Lens, which is linked to the famous Louvre in  
119 Paris aims at improving the image of this former coal-mining territory. Couch et al.  
120 {Couch 2011 #588} provides a thorough vision of urban renewal adopted by France in  
121 the last decades.

122 Nowadays, this territory has two important transport projects, the first is a tramway line  
123 from Lens-Liévin-Hénin-Carvin and the second is a BHLS one from Béthune to Bruay-  
124 la-Buissière. They concern the most frequent bus routes named “BuLLe” with the  
125 highest number of passengers.

126 This coal-mining area has a surface area of 76,115 hectares. It had a total of 594,017  
127 inhabitants in 2011. It also corresponds to the urban transport perimeter of the *Syndicat*  
128 *Mixte des Transports (SMT) Artois-Gohelle* (Regional Transport Authority) as shown  
129 on Figure 1. The *SMT Artois-Gohelle* is the local authority in charge of transport and  
130 mobility policies for 115 towns belonging to its territory. Few studies concerning this  
131 area with regards to transport issues exist. One study shows a very low household  
132 motorization in Lens (Lambert et al., 1988). However, this territory presents special  
133 features. It is a polycentric territory with two main centres: Lens (36,120 inhabitants in  
134 2008) and Béthune (25,697 inhabitants in 2008). It also presents suburban, peri-urban  
135 and rural belts.

136 [INSERT FIGURE 1 ABOUT HERE]

## 137 **2.1. Understanding former mobility patterns in the Coal Mining area of Lille**

138 Our studied territory is made of 115 towns where each one has a completely different  
139 density of inhabitants with different transportation needs. Nevertheless, they are all  
140 grouped in one urban transport perimeter.

141 Around 1965, oil consumption exceeds coal consumption. This is the beginning of the  
142 decline of the French coal industry. Oil is cheaper than coal. The coal mining industry is  
143 less productive in the Nord-Pas-de-Calais Region than in the other French regions. This  
144 new source of energy will come to confirm the decline of the industry of coal mining  
145 (Langrand and Paris, 1995).

146 During the mining era, services were concentrated around the mine shaft. Miners and  
147 their families could access all the services and jobs on foot (Froger et al., 2010). This  
148 explained short distances between their homes and workplaces. The social mining  
149 system provided many handouts to miners’ families in terms of transport, habitat,  
150 healthcare or education. Nowadays, it is more difficult because jobs, services such as  
151 education, health and shopping centres are more scattered around the territory. So, it  
152 creates many trips, mostly carried out by private car (63% around Lens, 71% around  
153 Béthune against 60% for the French average).



154 [INSERT FIGURE 2 ABOUT HERE]

## 155 **2.2. Current mobility patterns**

156 Table 1 represents the main transport mode used considering the place of residence of  
157 the interviewees in the HTS available on the study area. We have identified, by  
158 analysing the two available HTS, the need to reduce the number of car journeys and to  
159 encourage public transport usage in order to promote a more suitable mobility. The  
160 most important result of these two HTS is the 2% of share for urban public transport  
161 whatever the place of residence. In other words, it means, for our study area, only 2% of  
162 people take the bus to realise their displacement if you live in a rural or a peri-urban  
163 zone or in a centre. Surprisingly, it means even in very dense territories (like in centre,  
164 urban pole or secondary pole), the market share of public transport is only of 2%.

165 [INSERT TABLE 1 ABOUT HERE]

166 The quantitative results of the HTS exploitation are not satisfactory. For example, it  
167 does not explain the weak share of the public transport whatever the place of residence.  
168 Qualitative analysis can help to interpret quantitative results more easily and efficiently  
169 (Stopher and Jones, 2001).

170 Although HTS intend to provide information regarding the mobility patterns of the  
171 population of a certain territory in a representative manner, there are different authors  
172 such as Atkinson and Kintrea (2001) and Levitas et al., (2007), that discuss that certain  
173 groups are -at least- under-represented in HTS. They may suffer from a high degree of  
174 transport exclusion and other related area effects that we are not able to distinguish from  
175 the HTS results. A qualitative approach, considering the specificities of the population,  
176 can be an interesting thing. So, we choose to realise FGs with different populations in  
177 line with the specificities of the territory. The aim of the FGs is to provide a better  
178 knowledge of the mobility behaviours and the representation of different transport  
179 modes.

## 180 **3. Methodology and sample**

181 Qualitative analyses have received a lot of criticism. For example, the criticism  
182 concerns the small number of participants in a FG, which cannot constitute a  
183 representative sample (Linhorst, 2002). Paired with quantitative analyses, FGs can  
184 provide more information about the studied topic. Qualitative methods provide useful  
185 information, although their representation is by nature biased, they are in fact only  
186 considered to be representative of themselves. As noted by Currie and Delbosc {Currie  
187 2010 #610}, they are useful to explore causality among transport problems and social  
188 impacts.

189 Moreover, as we explained before in the first section, it might happen that certain  
190 population segments are not wholly represented in the survey, as explained by Hannes,  
191 et al. {Hannes #602}. It commonly happens with young or poor people. Therefore these  
192 population segments tend to be underrepresented.

193 The authors used FGs as a means for understanding certain minority groups which are  
194 commonly not well represented in the HTS (Lucas, 2011, Lovejoy and Handy, 2008), in  
195 order to inform, suggest and offer possible policy recommendations to improve their  
196 situation. The information obtained is also useful in order to be compared with the  
197 results of the two HTS available in the territory (2005 and 2006).

198 It is worth highlighting that no incentives were given to the people coming to the  
199 sessions. Sessions were organised in conference rooms made available by the respective  
200 employer or association. Participation was neither mandatory nor rewarded.  
201 Beforehand, many meetings were held in order to present the aim of this study to  
202 different authorities to allow these sessions to be held at their own center.

203 The sessions were always conducted by at least one of the authors with some external  
204 help to note taking. Each group consisted of, on average, 10 participants and the  
205 discussion lasted approximately one and a half hours. Sessions were carried out in an  
206 informal manner, posing questions about certain topics in order to raise the discussion.

207 Nine FGs were carried out in different towns (Hénin-Beaumont, Carvin, Oignies and  
208 Lens in the eastern part of the study area) during the year 2012. They were attended by  
209 people coming from many different towns in the region that for any reason had to go to  
210 the places where the FGs were realised.

211 We chose to focus on different types of population: Elderly (Retired), University  
212 students, unemployed, people enrolled in different social reinsertion programs, people  
213 involved in a cycling association and finally, regular workers without socioeconomic  
214 problems, in order to contrast their point of view. These different types of population  
215 offer a wide range of possible mobility solutions according to the specificities of our  
216 study area. To our point of view they all had transport limitations and their point of  
217 view about the transport situation of this area could disentangle both the lack of use of  
218 public transportation reflected in the HTS and their social exclusion situation. Table 2  
219 shows the professional profile of each FG.

- 220 1) Retired people and representatives of civil society from the “*Conseil de*  
221 *Développement de la Communauté d’Agglomération de Hénin-Carvin (CAHC)*”: 9  
222 people, 1 woman and 8 men.  
223 2) Workers from the CAHC: 8 people, 4 women and 4 men.  
224 3) Cyclotourists from different biking associations near Hénin-Beaumont: 6 people all  
225 men.  
226 4) Disadvantaged people from the community center for social action (CCAS) of  
227 Carvin: 36 people divided into 4 groups.  
228 - The first group was composed of 6 people: 5 women and 1 man. They were  
229 mainly adult recipients of social minima and unemployed.  
230 - The second group was composed of 10 people: 3 women and 7 men. They  
231 were mainly young adults without professional project and too young to benefit from  
232 the social minima.

233 - The third group was composed of 12 people: 8 women and 4 men. They were  
234 mainly people in situations of illiteracy and who want to learn the basic skills.  
235 - The last group was composed of 7 people all women. They were mainly adult  
236 recipients of *social minima* (guaranteed minimum income), and unemployed.  
237 5) Young people experiencing difficulties from an association of Oignies *Rencontres et*  
238 *Loisirs*: 5 people, 2 women and 3 men.  
239 6) Students from the Institute of Technology from Lens: 10 people, 6 women and 4  
240 men.  
241 According to this description, it is possible to assert that we focused on disadvantaged  
242 people (5 out of 9 FGs).

243 [INSERT TABLE 2 ABOUT HERE]

244 Participants also completed individual questionnaires, mainly closed ended questions,  
245 which main results are presented in Table 3.

246 [INSERT TABLE 3 ABOUT HERE]

247 Figure 3 shows the distribution of the participants of the nine FGs. This figure is just  
248 focused on people who lived in the study area. Finally, maps similar to the one in Figure  
249 3 were handed out to participants, who used them to answer questions as: Where do you  
250 live? / Where do you carry out most of your activities? / Where do you enjoy going to?

251 [INSERT FIGURE 3 ABOUT HERE]

#### 252 **4. Main findings from the BM focus groups**

253 After transcribing the FGs conducted, our qualitative analysis may be summarized into  
254 8 points: representations of the study area, job opportunities, driving licence, car, urban  
255 public transports, other transport modes, vision of structural planning projects and  
256 vision of the sustainable development. The results presented below show the main ideas  
257 extracted from the transcript of FGs. The use of a software to analyse the information  
258 was tested but it showed no great outcomes. All the sessions were recorded and  
259 transcript was carried out by one of the authors in the same language (French).  
260 Unfortunately the use of the software is extremely linked with the accuracy of the  
261 transcript.

##### 262 **4.1 Representation of the study area**

263 The historical mining culture is still very present. This culture often means proximity  
264 (workers from the CAHC). During the mining era, the populations were grouped around  
265 the mine shafts. People didn't have to travel, or just a little bit, to go to work or to other  
266 places of service. All the services were accessible on foot. Natives are attached to their  
267 territory of birth.

268 "Social and family roots have an impact on the choice of place of residence. These two  
269 factors may be stronger in this area than anywhere else in France." (Cyclotourists)

270 “We come from here, were born here, we have our roots here so obviously we have ties  
271 ... I stand in the neighborhoods where my parents lived, where my grandparents lived. I  
272 have a cultural history here.” (Young person from Oignies)

273 There may also have a vision of a region suffered. For major cities of the study area,  
274 facilities seem sufficient. This is not the case for the towns of Oignies and Carvin where  
275 a lack of services and facilities exist. Most of participants want a larger services supply.

276 “Carvin station closed for twenty years: we had to move to Libercourt.” (First group of  
277 disadvantaged people)

278 “The pool burned, we must now go to Courrières by bus.” (Third group of  
279 disadvantaged people)

280 The maps handled out to the participants showed us that, especially in the case of  
281 people in risk of social exclusion, the knowledge of the region is quite limited. They  
282 tend to move in the same area for most of their activities. On the other hand, University  
283 students tend to come to the territory to study but many do not live here. They go to  
284 other places like the city of Lille for leisure activities. Finally, the groups of people in  
285 the biking-group (cyclotourisme) have a more expanded vision of the territory and its  
286 opportunities.

## 287 **4.2 Job opportunities**

288 People who already have a job or who are retired express the lack of activity on the  
289 study area. Jobs in shopping centers are only available to very few disadvantaged.

290 “There are no jobs with high added value in the territory.” (Retired people)

291 “There is a lack of voluntarism to work elsewhere.” (Cyclotourists)

292 State handouts offered during the mining period remained rooted in some families. For  
293 example, it is common for some people to go see the mayor of their city to get a job for  
294 themselves or a family member.

## 295 **4.3 Representation of the driving licence**

296 Young or disadvantaged people link the access to employment with the possession of a  
297 driving license or a private car. To find a job, as in many territories, a driving license is  
298 essential.

299 “No job no money, no money no driving license: vicious circle!” “There are many  
300 employers who say that without the driving license they do not hire.” (Young person  
301 from Oignies)

302 “Now if you do not have a driving license you do not have work. There are many jobs  
303 in which it is necessary.” (Second group of disadvantaged people)

304 The first problem is the price of the driving license, around 1,100€. The second  
305 problem lies in the acquisition of knowledge of the Highway Code.

306 “I do not have a driving license because it is too expensive.” (First group of  
307 disadvantaged people)

308 “I do not have a driving license because I mess with the code.” (Young person from  
309 Oignies)

#### 310 **4.4 Representation of the car**

311 The majority of trips are made by car except when individuals do not have a driving  
312 license. There are few recreational facilities in the area. The use of a car is essential to  
313 have access to these facilities. The car remains the most often used, the fastest and the  
314 most convenient transport mode. There is no problem to park in the study area  
315 (Workers from the CAHC).

316 “Inevitably for me it is the most convenient way, maybe not in monetary terms but in  
317 terms of time.” (Workers from the CAHC)

318 “Before, I had no car, I could not leave my home without my parents.” (Students from  
319 the Institute of Technology of Lens)

320 To go to the Institute of Technology, it is more convenient to use one’s own car as train  
321 and bus do not always match. Even to eat at the university restaurant which is not in the  
322 Institute, it is sometimes necessary to go by car to save time on the often short noon  
323 breaks (Students from the Institute of Technology of Lens).

324 The car is seen as used to purchase or carry heavy objects (cyclotourists). However, for  
325 the elderly or retired people, the use of the car is not unproblematic (Retired people).

326 “We can no longer drive (aging of the population) ... my housekeeper brings me or my  
327 niece because my children live far.” (Retired people)

#### 328 **4.5 Representation of the urban public transport**

329 The problems incurred by the participants about the urban public transports are of 5  
330 kinds: the service of the public transport (PT), the timetables, the travel times, the cost  
331 of using PT and the other activities do not match properly the PT.

332 “It is for me a kind of concentration of transport of the strong points and other areas are  
333 a little left out.” (Workers from the CAHC)

334 There is a clear desire for more PT in rural areas and on Sunday. As the population  
335 lives more and more away from the centers, it is not possible to ignore the needs for PT  
336 in the most rural areas. In the same way, on Sunday buses do not run except in Lens or  
337 in Noyelles-Godault. So it is difficult to move if people do not own a car.

338 “Before there were buses to the Hénin-Beaumont hospital, now there are no more and it  
339 is annoying.” (First group of disadvantaged people)

340 “On Sunday, buses do not run so we cannot do anything.” (Young person from Oignies)

341 “On Sunday there is no bus... it is blocked, it is dead.” (Third group of disadvantaged  
342 people)

343 Shuttles could be generalized to specific events (markets, spectacles, fireworks).  
344 Currently there are shuttles to the Béthune or Lens market organized by the transport  
345 authority with a bus every half hour.

346 Timetables and travel times does not seem appropriate. There is a lack of PT during the  
347 night for example for an evening out. To make PT more attractive it would be necessary  
348 to increase the frequency and expand the timetables. In 2012, the transport authority  
349 had made some changes on the organisation of the PT network. These changes in the  
350 network of PT do not seem to have an impact on the trips of participants.

351 “If I do not take the bus to work it is mostly because the timetable is not suitable, there  
352 is never a bus early in the morning so I take the car.” (Cyclotourists)

353 “The timetable is the problem, the bus runs until 8:00 pm after it no longer passes.”  
354 (Young person from Oignies)

355 “It's hard for me to say that I leave the meeting because I have to take my bus.”  
356 (Workers from the CAHC)

357 Travel times by bus are perceived as too long, sometimes longer than by car (workers  
358 from the CAHC). For disadvantaged women, who live in Carvin, it is possible to  
359 perform many activities by walking. Travel times by bus are often very long compared  
360 to the travel time on foot (Second group of disadvantaged people).

361 “At least to move further, you must first go to Henin-Beaumont ... or you must take 4  
362 buses.” (Young people from Oignies)

363 “There is no culture of PT here.” (Students from the Institute of Technology of Lens)

364 “They tell me all the time that's too long. For example to go from Carvin or Henin-  
365 Beaumont to Libercourt you need 40-50 minutes while you could do it in 10 minutes.  
366 This is often one of the obstacles to the use of the PT.” (Third group of disadvantaged  
367 people)

368 For most of participants, using PT is too expensive. Taking the PT with the family, for  
369 example for leisures, can be costly (first group of disadvantaged people). There are  
370 special rates for large families or disadvantaged people, but the information is hard to  
371 be known and understood.

372 “Going by bus is even more expensive than taking the car.” (Retired people)

373 “It costs me even more to go to Lens and Béthune by PT.” (Workers from the CAHC)

374 Places of employment in the periphery of the study area are often few or not served by  
375 PT. PT access is too long when accessibility exists. It is notably the case for the huge  
376 shopping center of Noyelles-Godault (retired person). Another difficulty may be  
377 transporting purchases when using PT. Difficulties must be an obstacle to the use of PT  
378 (cyclotourists). There has been a development of alternatives by the most vulnerable  
379 populations such as the use of the pushchair to help transport purchases (First group of  
380 disadvantaged people).

#### 381 **4.6 Vision of the other transport modes**

382 Carpooling is practiced by the students of the Institute of Technology of Lens, some  
383 young disadvantaged people or workers in a same company. Elsewhere carpooling is  
384 non-existent. Sometimes carpooling can be enhanced between participants in the same  
385 meeting (cyclotourists). Carpooling is easy with some friends (third group of  
386 disadvantaged people). Interestingly, the University of Lens (Institute of Technology of  
387 Lens) has put into practice a good example of sustainable mobility with efficient  
388 resources. They have implemented a system of car pooling where students are allocated  
389 in groups according to their place of residence. Therefore it is easier for them to agree  
390 on time-schedules to arrange home based trips to University and back. In the hall of the  
391 University, a chart that must be completed is available. Students have to register their  
392 name and place of residence as well as the start and the end of their classes. Everything  
393 is organised to be easy for carpooling. Students find it advantageous, especially for  
394 financial reasons, and do not consider that being classified by place of residence has any  
395 negative connotation.

396 “There are systems unorganized, neighbours helping neighbours, illegal parking of car  
397 and then make carpooling.” (Retired people)

398 Websites offering this service exist but the reflex is not yet developed. Carpooling is  
399 difficult to implement, everyone has different schedules (cyclotourists, young people  
400 from Oignies).

401 “We wanted to set up a table of carpooling for students who live in a same area can  
402 meet... after free choice to accept carpooling or not.” (Students from the Institute of  
403 Technology of Lens)

404 It is common to request the neighbours to be accompanied. Nevertheless, it is more  
405 complicated with a large family. As a person in the first group of disadvantaged people  
406 said: “it would required a minivan”. Anyway, car loan can not be envisaged.

407 “Asking someone to loan his car is like asking him to lend us € 20,000.” (Third group  
408 of disadvantages people)

409 Express Regional Train (TER) seems appropriate for the service to major centers of the  
410 study area and the city of Lille. The problem will be in the bus service of the various  
411 train stations in the area.

412 “You need 40 minutes to go to Lille. It does not take long to serve Libercourt.” (Third  
413 group of disadvantaged people)

414 “I come from Béthune then I take the train, it's simple: Lens-Bethune it's ok!” (Student  
415 from the Institute of Technology of Lens)

416 Taking the train without a car is difficult because travel time by bus can be very long  
417 (Young people from Oignies).

418 Concerning bike, this is not mentioned as an easy transport mode to use even if 72% of  
419 participants have one.

420 “Here you go by bike and you get crushed easily.” (Students from the Institute of  
421 Technology of Lens)

422 “People are afraid to cycle because they feel insecure about the car.” (Cyclotourists)

423 Bicycle use is perceived as complicated especially by the younger generations.

424 “We must succeed in getting a place among the cars.” (Fourth group of disadvantaged  
425 people)

426 If distances are too small the bike is not used and people walk. If the distances are too  
427 large they prefer to take the bus. Moreover, the weather conditions of the study area not  
428 seem typically favourable.

429 “In the summer it's great when the weather is good.” (Third group of disadvantaged  
430 people)

431 There are problems of connectivity between bike paths that are not continuous in the  
432 area and barriers to the use of the paths (retired people). Cycling can be problematic to  
433 make trips between home and the workplace (cyclotourists). There are some difficulties  
434 to combine cycling and PT. It is not possible to take a bike on the bus and there are no  
435 secured locations at the bus stops (first group of disadvantaged people).

436 Walking is practiced especially over short distances and disadvantaged populations.

437 “It saves money!” (First group of disadvantaged people)

438 The lack of pedestrian streets does not make travelling on foot easy. Often cars do not  
439 respect restrictions.

440 “Cars are on the sidewalks and we must walk on the road.” (Fourth group of  
441 disadvantaged people)



442 The use of walking limits the distances that can be travelled. But for some people this  
443 would not be an obstacle to the realization of their activities because they can do many  
444 things on foot (second group of disadvantaged people).

445 Concerning the new mobility services, participants to FGs have few or no knowledge of  
446 the new mobility services implementing in the territory and proposed by the transport  
447 authority and of their specific pricing. Private initiatives are therefore implementing.  
448 For example, it is the case for carpooling at the Institute of Technology of Lens,  
449 carsharing between the members of a same family or between neighbours. A walking  
450 school bus is being tested in the city of Courrieres (cyclotourists). Reflection is ongoing  
451 for serving peripheral employment areas, kind of industrial bus (workers from the  
452 CAHC).

#### 453 **4.7 Vision of structural planning projects**

454 Four projects were selected: the Louvre-Lens museum, the registration of the mining  
455 area to the UNESCO World Heritage, the tramway project on the study area and the  
456 project of Lille metropolitan area. All were invited to give their views and rank the  
457 projects according to the importance they attached of these different projects.

458 These projects are mainly pointed at the city of Lens or other large centers of the  
459 territory. It is difficult for participants to imagine that these projects will affect smaller  
460 cities of the study area. Participants have a common vision of a redeveloping territory  
461 with major projects. However, their opinions are mixed on these ones.

462 “What concerns me is that we have some projects, but there are no large industrial  
463 projects.” (Retired people)

464 Overall, the Louvre-Lens generates excitement. Changes are immediately visible with  
465 embellishment work in the city of Lens. For disadvantaged people, it is inconceivable  
466 to go to the museum on their own (first group of disadvantaged people).

467 “We do not have the culture of going to the museum.” (Workers from the CAHC)

468 The tramway project set off suspicion: deformity of the landscape, noise from passing  
469 trains.

470 The inscription of World Heritage site by UNESCO is increasingly challenged. It is a  
471 pride for the children and grandchildren of miners (fourth group of disadvantaged  
472 people). For other population groups, the effect of registration is considered as non-  
473 existent (students from the Institute of Technology of Lens, second group of  
474 disadvantaged people).

#### 475 **4.8 Vision of sustainable development**

476 All participants say they have some ecological sensitivity. However, they lead few  
477 actions going in this direction.

478 “I feel concerned with ecology in the sense that I do not want to live in a garbage. [...]
479 Now, ecology is not accessible to any pocket either.” (Young people from Oignies)

480 Some people take on ecology. For example, some people choose to use the bike almost
481 systematically and defend the right of bike users (cyclotourists). Other people
482 participate in the environment committee at the development council of the CAHC
483 (retired people).

484 For all participants, there are no specific actions in favor of sustainable development.
485 These are mostly actions "strained": selective sorting of waste, composting, recovery of
486 rainwater...

487 The application of the ecological sensitivity to individual mobility is not automatic.
488 There is few modal shifts on sustainable modes or PT due to ecological purposes. The
489 use of walking or PT is more constrained than chosen.

490 “I force myself to take the bus from time to time in the interests of ecology.” (Second
491 group of disadvantaged people)

492 There is a need for sensitisation of the population.

493 “Elderly people sometimes also have difficulty to understand.” (Cyclotourists)

494 “Out of school, I see kids who throw their papers down and parents say nothing. Well
495 done!” (First group of disadvantaged people)

496 **5. Conclusions and policy implications**

497 FGs conducted helped to clarify the problems of this particular territory:

498 - The absence of a mobility culture in line with the mining history of study area,

499 - A strong sense of attachment to their territory of birth along with the perception of a
500 suffered territory, especially in the case of more disadvantaged people or elderly
501 people, whereas University students felt like it was not an interesting territory, and were
502 interested to move to other places in France if they had the opportunity.

503 - Vision of a well endowed with various services and equipments area, but stronger
504 need to being turned to Lille particularly in accessing to the labour market,

505 - Possession of a driving license and a private car is extremely needed to access to
506 employment opportunities, with many obstacles (especially financial obstacles),

507 - Problems in the organization of the PT in the territory (cost, opening hours, schedules,
508 frequency, service) but TER appear effective for serving the largest centres of the
509 territory,

510 - Difficulties and lack of culture of using the bike, hence people are forced to walk
511 (especially the most vulnerable population). The former would not be a problem, and

512 rather an opportunity for a healthy living, if only small shops like groceries, butchers,  
513 markets, and leisure activities such as cinema, cafes, etc. around their neighbourhood  
514 were not closing or moving out of the area. Socially excluded people, had a positive  
515 image of the Louvre museum's opening, however, they had no clear intention of  
516 visiting.

517 Here are some solutions that could be implemented in the area. First, we can think of  
518 some improvements on the PT network (reductions in travel time, conversion of the two  
519 main bus routes into BHLS). Then, you can include aid for the obtainment of the  
520 driving license or the Highway code to help with search efforts or return to work  
521 (financial aids, aids for learning and understanding the Highway Code). There are also  
522 social vehicle loans for people wishing to return to employment. Transport authority  
523 may choose to provide more and better information about mobility services available in  
524 the study area (paper communication, education and learning PT, awareness of the PT  
525 network, better communication on specific rates for different populations). Another  
526 solution could be the strengthening of economic and leisure activities throughout the  
527 area to facilitate their access to the entire population.

528 More opportunities should be given to the people who want (or more realistically,  
529 "need") to have their driving license in order to access to employment alternatives. Thus  
530 financial support is necessary.

531 Car pooling programs should be better advertised in firms around the territory in order  
532 to reduce transport cost of employees. The government should enhance and promote  
533 other transport plans for enterprises through different schemes, which have proved to be  
534 positive for both the employers and employees. The Spanish publication from the IDAE  
535 {IDAE 2006 #577} is an example of how to manage these plans. These options could  
536 be better exploited when firms are located in major areas of economic activities.

537 Bike sharing schemes should start operating in this area, such as the one in Lille city  
538 (V'Lille), in order to promote soft modes of transportation, especially for younger  
539 people.

540 Economic activities, especially for retail shops, should be promoted by the local  
541 governments; otherwise people would be in an even more disadvantaged position to  
542 access their basic needs.

543 A clear and understandable publicity campaign for the territory regarding sustainable  
544 transport should be put into practice. It was astonishing the number of people  
545 (especially in a disadvantaged position) that did not use a monthly ticket but a single  
546 one every day, even if the former is naturally the cheapest option.

547 Finally, this research is very helpful to understand the territory and it brings about new  
548 opportunities, for example to improve public transport services, to improve the  
549 questions in the next HTS and finally, to better understand the territory for several field

550 actors. This research also suggests some policy implications to allow an area in urban  
551 regeneration to adopt a more sustainable mobility less focused on car use.

## 552 **6. Acknowledgements**

553 This research has been funded by the Nord-Pas-de-Calais Region and the French  
554 Environment and Energy Management Agency (ADEME) within the research project  
555 SUIM (Innovative Urban Services for new Mobility). The authors wish to acknowledge  
556 these two institutions for their helpful support and Dr Odile Heddebaut, researcher at  
557 the French Institute of Science and Technology for Transport , Development and  
558 Networks (IFSTTAR), co-ordinator of the SUIM project.

## 559 **7. References**

560 Bryman, A. 2006. Integrating quantitative and qualitative research how is it done?  
561 Qualitative research 6 (1): 97-113.

562 Conférence Permanente du Bassin Minier. 1998. Livre Blanc: une ambition partagée  
563 pour l'Après-Charbon. Conseil Régional Nord – Pas de Calais, 173 p.

564 Couch, C., Sykes, O., Börstinghaus, W. 2011. Thirty years of urban regeneration in  
565 Britain, Germany and France: the importance of context and path dependency. Progress  
566 in Planning 75: 1-52.

567 Clifton, K., and S.L. Handy. 2003. Qualitative methods in travel behaviour research.  
568 Transport Survey Quality and Innovation:283-302.

569 Hine, J., Scott, J. 2000. Seamless, accessible travel: users' views of the public transport  
570 journey and interchange. Transport Policy 7: 217-226.

571 Lambert, T., Madre, J.L., Francq, B. 1988. Analyse locale de la motorisation,  
572 CREDOC, Collection Des Rapports, Numéro R54.

573 Langrand, M., Paris, D. 1995. Des villes et des homes. Le devenir de l'ancien bassin  
574 minier. Préfecture de la Région Nord – Pas de Calais, S.G.A.R., Centre d'études de de  
575 prospective, 191 p.

576 Linhorst, Donald, M., 2002. A review of the use and potential of focus groups in social  
577 work research. Qualitative Social Work 1: 208-228.

578 Lucas, Karen. 2011. Making the connection between transport disadvantage and the  
579 social exclusion of low income populations in the Tshwane region of south Africa.  
580 Journal of Transport Geography 19 (6) (11): 1320-34.

581 Lovejoy, K., Handy, S. 2008. A case for measuring individuals' access to private-vehicle  
582 travel as matter of degrees: Lessons from focus groups with Mexican immigrants in  
583 California. Transportation 35 (5): 601-612.

- 584 Sale, J. E. M., Lohfeld, L. H., Brazil, K. 2002. Revisiting the Quantitative-Qualitative  
585 debate: Implications for Mixed-Methods research. *Quality and Quantity* 36 (1), 43-53.
- 586 Stopher, P. R., Jones, P. M., 2001. Developing standards of transport survey quality.  
587 Keynote paper prepared for the International Conference on Transport Survey Quality  
588 and Innovation: how to recognize it and How to achieve it. South Africa, August 2001.

589 [TABLES]

590 Table 1 – Results from the Household Travel Surveys from the Lens (2006) and Béthune (2005) zones

Place of residence	Main transport mode								Total
	Car driver	Car passenger	Urban public transport	Other public transport	Bike	two-wheeled motorized vehicle	Walking	Other	
CENTRE	0.41	0.17	0.02	0.01	0.02	0.01	0.35	0.01	1.00
URBAN POLE	0.43	0.19	0.02	0.01	0.02	0.01	0.31	0.01	1.00
SECONDARY POLE	0.45	0.20	0.02	0.02	0.02	0.01	0.28	0.01	1.00
INDUSTRIAL SUBURB	0.44	0.21	0.02	0.02	0.02	0.02	0.26	0.01	1.00
MIXED SUBURB	0.51	0.22	0.02	0.02	0.03	0.01	0.18	0.01	1.00
MIXED PERI-URBAN	0.54	0.22	0.02	0.04	0.02	0.01	0.14	0.02	1.00
PERI-URBAN	0.60	0.22	0.02	0.03	0.01	0.02	0.10	0.00	1.00
RURAL	0.73	0.14	0.01	0.01	0.00	0.00	0.05	0.06	1.00

591

592 Table 2 – Professional profile of people participating in the sessions

Focusgroup	Profession						Total
	Retiree	University S	Non-qualif	Qualified	Unemployed		
1	7	0	1	1	0	9	
2	4	0	0	2	0	6	
3	0	0	1	1	3	5	
4	0	0	2	5	0	7	
5	0	10	0	0	0	10	
6	0	0	0	1	5	6	
7	0	0	0	1	9	10	
8	0	0	0	1	11	12	
9	1	0	0	0	6	7	
Total	12	10	4	12	34	72	

593

594 Table 3 – Main characteristics of people attending the sessions

Variable	Description	Obs	Mean	Std. Dev.	Min	Max
Persons		76	5.2632	2.9119	1	12
Sex	Female=1	73	0.5479	0.5011	0	1
Age		70	37.3857	19.3550	17	87
Situation at home	Reference=Mother					
Father		73	0.1644	0.3732	0	1
Son/Daughter		73	0.2603	0.4418	0	1
Couple no children		73	0.0685	0.2543	0	1
Single		73	0.1644	0.3732	0	1
Others (like widow)		73	0.0548	0.2292	0	1
Family situation	Reference=With children younger than 5 years old					
With children between 5-12 years old		43	0.3256	0.4741	0	1
With children older than 12		43	0.1628	0.3735	0	1
No kids		43	0.3721	0.4891	0	1
Number of people at home	Reference=1					
2		69	0.2464	0.4341	0	1
3		69	0.1304	0.3392	0	1
4		69	0.2464	0.4341	0	1
5		69	0.1594	0.3687	0	1
6		69	0.0435	0.2054	0	1
Home property	Reference=Own property					
Rented		71	0.4789	0.5031	0	1
Other		71	0.1690	0.3774	0	1
Monthly economic resources	Per household					
Less than 1,000 €		61	0.2459	0.4342	0	1
1,001 - 2,000 €		61	0.1967	0.4008	0	1
2,001 - 3,000 €		61	0.0820	0.2766	0	1
4,001 - 5,000 €		61	0.0492	0.2180	0	1
More than 5,000 €		61	0.0656	0.2496	0	1
Driving License?	Yes=1	72	0.5139	0.5033	0	1
Car ownership	Yes=1	71	0.5211	0.5031	0	1
Moto ownership	Yes=1	62	0.0000	0.0000	0	0
Bike ownership	Yes=1	65	0.7231	0.4510	0	1
Main transport mode	Reference=Car-driver					
Car-passenger		73	0.0959	0.2965	0	1
Walking		73	0.3288	0.4730	0	1
Public transport		73	0.0822	0.2766	0	1
Bike		73	0.0274	0.1644	0	1
Transport costs per week	In Euro	45	20.1556	15.8171	0	60
Car necessity for activities	Yes=1	57	0.4561	0.5025	0	1
Monthly ticket pass	Yes=1	71	0.1972	0.4007	0	1
Occupation	Retired=1					
University student		72	0.1389	0.3483	0	1
Qualified worker		72	0.1667	0.3753	0	1
Non qualified worker		72	0.0556	0.2307	0	1
Unemployed		72	0.4722	0.5027	0	1

596 [FIGURES]

597

598

599

600

601

602

603

604

605

606

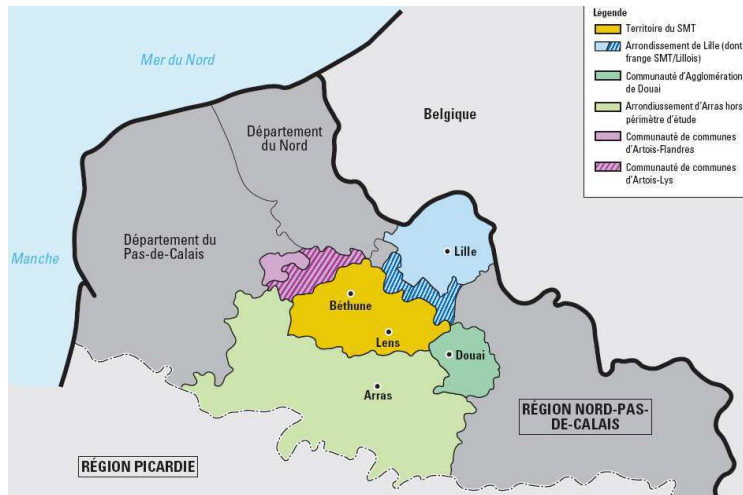
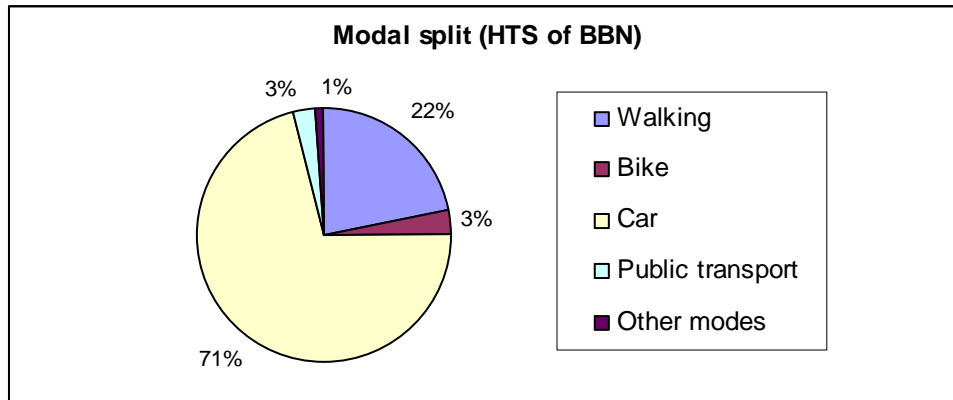
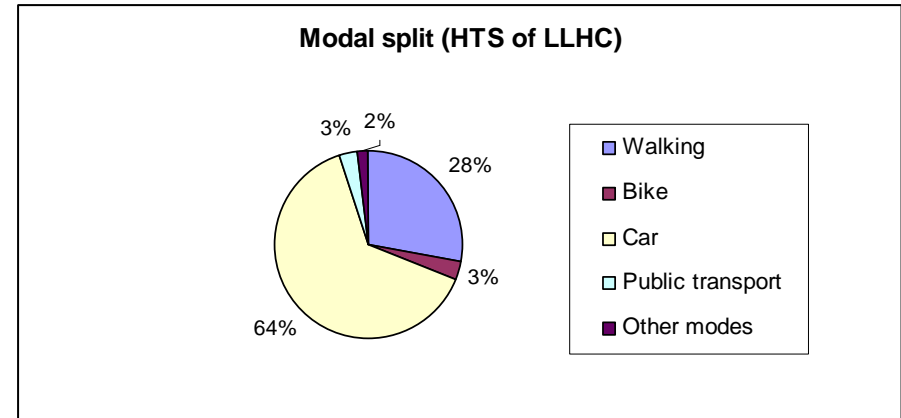


Figure 1 – The SMT Artois Gohelle area in the Nord-Pas-de-Calais Region

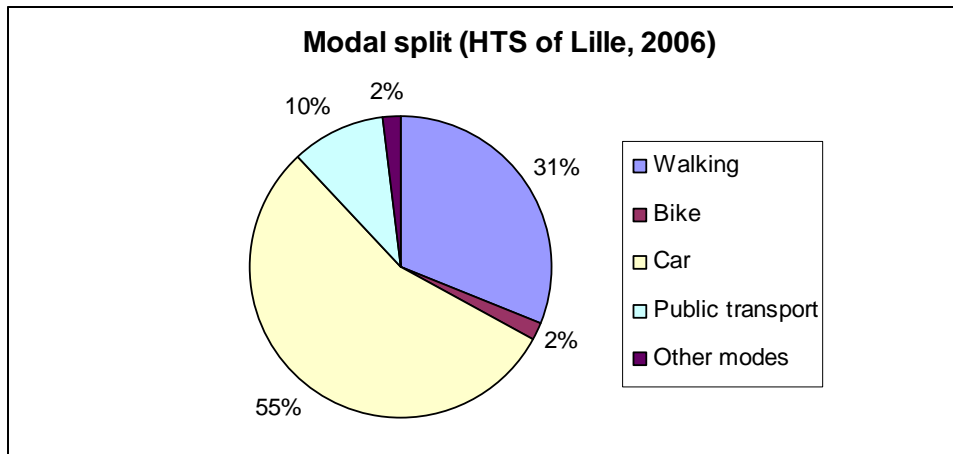




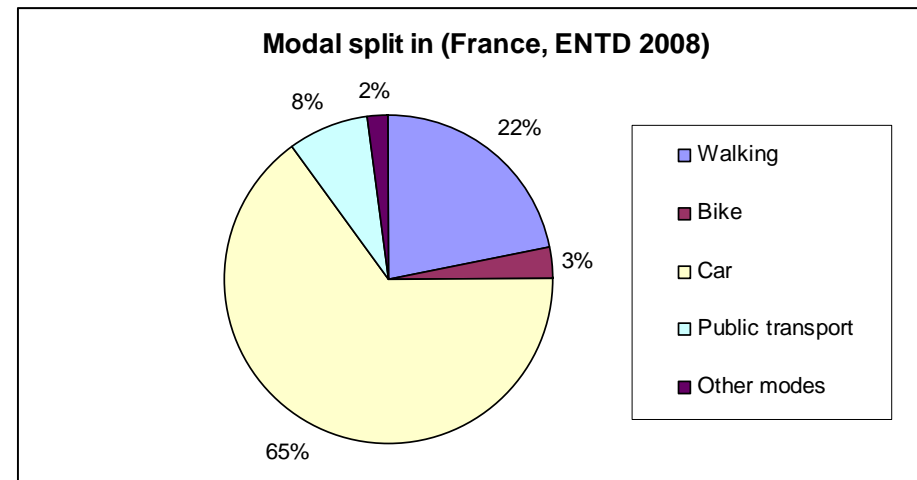
(a) Our study area: HTS of Béthune-Bruay\_Noeux (2005)



(b) Our study area: HTS of Lens-Liévin-Hénin-Carvin (2006)



(c) Modal split in Lille agglomeration (2006)



(d) Average modal split in France (2008)

Figure 2 – Modal split: comparison between our study area, the agglomeration of Lille and the French case

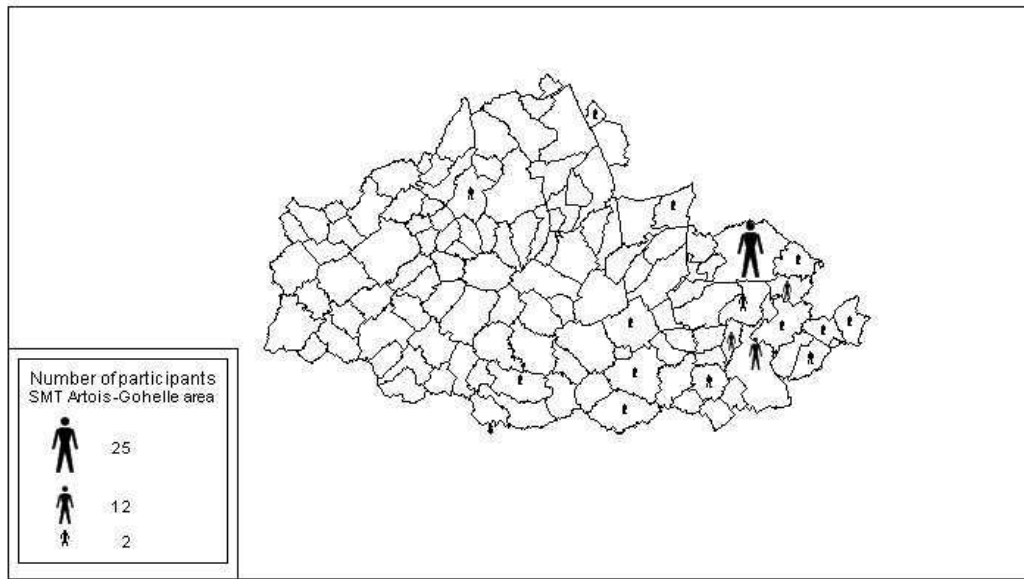


Figure 3: Distribution of the participants of the focus groups conducted

## Documents de travail récents

- Richard Duhautois and Fabrice Gilles: “Payroll tax reductions and job flows in France” [\[2013-34\]](#)
- Cristina Badarau, Florence Huart and Ibrahima Sangaré : “Indebtedness and macroeconomic imbalances in a monetary-union DSGE” [\[2013-33\]](#)
- Marion Drut: “Vers un système de transport opérant selon les principes de l'économie de la fonctionnalité?” [\[2013-32\]](#)
- Jérôme Héricourt and Sandra Poncet : “Exchange Rate Volatility, Financial Constraints and Trade: Empirical Evidence from Chines” [\[2013-31\]](#)
- Jean-Baptiste Desquilbet et Fédi Kalai : “La banque conventionnelle et la banque islamique avec fonds propres : contrat de dépôt et partage du risque de liquidité” [\[2013-30\]](#)
- Cécily Defoort and Carine Drapier: “Immigration and its dependence on the welfare system: the case of France” [\[2012-29\]](#)
- Carine Drapier and Nadiya Ukrayinchuk : “Les conditions de travail et la santé des immigrés : Seraient- ils plus résistants à la pénibilité au travail que les natifs ?” [\[2012-28\]](#)
- Etienne Farvaque, Muhammad Azmat Hayat and Alexander Mihailov: “Who Supports the ECB? Evidence from Eurobarometer Survey Data” [\[2012-27\]](#)
- Nathalie Chusseau, Joël Hellier and Bassem Ben-Halima : “Education, Intergenerational Mobility and Inequality” [\[2012-26\]](#)
- Nathalie Chusseau and Joël Hellier : “Inequality in Emerging Countries” [\[2012-25\]](#)
- Nathalie Chusseau and Michel Dumont: “Growing Income Inequalities in Advanced” [\[2012-24\]](#)
- Kirill Borissov and Stéphane Lambrecht : “The dynamics of income inequality in a growthmodel with human capital and occupational choice” [\[2012-23\]](#)
- Thomas Baudin: “More on Religion and Fertility: The French Connection” [\[2012-22\]](#)
- Thomas Baudin, David de la Croix and Paula Gobbi: “DINKs, DEWKs & Co. Marriage, Fertility and Childlessness in the United States” [\[2012-21\]](#)
- Hamza Bennani: “National influences inside the ECB: an assessment from central bankers' statements” [\[2012-20\]](#)