10 points below the average for Catalonia. At weekends and on public holidays the values are still more extreme. This pre-eminence of private transport to the detriment of journeys on foot and on public transport is a fact related to growing urban dispersion, very clear in the last decade in the Comarques Gironines, and to a public transport or urban and inter-urban buses, regional and local railways which is territorially uneven and which does not meet everyday mobility needs. Public transport only achieves more significant usage percentages in journeys to other regions.

The metropolitan region centralises 90% of external journeys linked to the Girona region. The second region with an outstanding role compared to the others is Comarques Centrals. Among these links, the number of journeys at weekends and on public holidays is particularly outstanding, doubling compared to working days.

Finally, a county analysis of flows makes clear the attraction exercised by Gironès, Pla de l’Estany and one end of la Selva. In relation to the latter county, flows reflect the dual nature of this area, with part of the plain and coast having solid links with the metropolitan region of Barcelona and another part of the plain and the interior linked directly to Girona. Ripolles would be the other county that escapes this direct attraction and also maintains a significant percentage of journeys outside the region, following the axis opened up by the Ter southwards.

Meanwhile, a significant piece of information offered by the data is the indication of the insufficiency of public transport with a metropolitan logic, given some very low percentages for use of this mode in an area with strong relationships. In inter-county journeys, mobility is basically private everywhere —above 80%. Only in Alt Empordà and Gironès does public transport achieve significant figures, probably because of the differential fact of the rail service, which also means that the highest percentage for public transport use between two counties occurs between Alt Empordà and Gironès.

DAILY MOBILITY IN CAMP DE TARRAGONA
Joan Alberich González

1. Camp de Tarragona: the territory and demographic processes

The first official record we have of this territory being referred to as Camp de Tarragona dates back to 1315, however it was not until 1995, when the Pla territorial general de Catalunya (DPTOP, 1995) was approved, that it was legally recognised as one of the seven territorial areas of Catalonia, in turn the beginning of its further division into geo-political administrative regions.

The territory covered by the Camp de Tarragona comprises a total of six regions: three regions which make up the “Camp” in the strictest sense (Alt Camp, Baix Camp and Tarragonès), and the three bordering regions (Baix Penedès, Priorat and the Conca de Barberà —see figure 1). It covers a total of 2,997.7 km² (9.45% of the total territorial area comprising the autonomous Catalan territory), with a resident population, as of January 1st 2007, of 575,333 (8.0% of the total population of Catalonia).

Leaving aside more detailed analysis, which is not the focus of this study, the demographic evolution of the Camp de Tarragona can be seen in terms of two processes: one which we could call “quantitative” (population growth), and one of a “qualitative” nature (how towns and cities have developed and their functional integration within this territory).

From the quantitative perspective, one outstanding feature is the very significant population growth in recent years, making it the most dynamic of the seven territorial areas of Catalonia: if we take the year 2000 as a starting point, the population has grown by 30.1%, double the overall figure for Catalonia (15.1%), and significantly higher than its closest rival, the Girona regions, (24.9%). It is also worth noting that the population growth rate for the territory’s metropolitan area is the lowest (only 12.1%).

These population growth figures for Camp de Tarragona reflect general demographic tendencies in Catalonia which, since the beginning of the 21st century, have been due to three complementary factors. First, the upturn in the birth rate after the lowest recorded rates at the end of the 20th century, above all due to three complementary factors. First, the upturn in the birth rate after the lowest recorded rates at the end of the 20th century, above all due to the arrival of a sizeable generation from the baby boom who are now at the reproductive age. Secondly, the increase in migratory flows from outside the Spanish state, which has accounted for the considerable increase in foreign residents: in 2000 they represented 4.1% of the total population, but by 2007 this figure had risen to 16.1%. Third and finally, the decentralising tendency of population distribution moving from the Metropolitan Area of Barcelona to the metropolitan belts and neighbouring municipalities.

But from my point of view, when analysing the mobility of the residents of Camp de Tarragona, what is even more interesting than this quantitative development in terms of population growth, is the qualitative perspective, which allows us to see a developing process of urban growth and cohesion. Camp de Tarragona is increasingly becoming a growing metropolitan area characterised by a high degree of interrelations between its municipalities resulting from mobility flows. These dynamics are sustained by the traditional urban triangle comprising the cities of Tarragona, Reus and Valls which favour polycentric urban structures; and the coastal tourist area, Costa Daurada, which generates the internal tourist-residence mobility characteristics of this area.

These are the findings of various studies on this region (González, 2003, 2004), including a recent doctoral thesis on the living spaces of the Catalan population and the functional spaces they generate, based in part on data from the 2001 census (Alberich, 2007). The way is now open to pursue more in-depth studies, and so this analysis of the territorial distribution of mobility flows is made from the perspective of functional interrelations between territories (see section 4).

2. Mobility in camp de Tarragona

In an attempt to broach the widest range of aspects related to mobility covered by this survey, the information presented in this section covers the following aspects: overview of the data, motives for making journeys, principal means of transport used, average time taken and which hours of the day, territorial distances travelled and, finally, the mobility differential according to the socio-demographic features of the population.

2.1. Overview

The 4+ resident population in the Camp de Tarragona in 2006 (1,275,351) made a total of 11,867,435 weekly journeys: a daily average of 1,849,355 on weekdays and 1,310,330 on weekends. Here, a journey is understood as the trajectory from home to a given destination for whatever reason, making use of one or a combination of transport means.

If one considers these figures bearing in mind the percentage of the population of Camp de Tarragona compared to Catalonia as a whole, a certain degree of “over-mobility” can be seen for inhabitants of this region: the figure for weekly journeys (8.0%) is slightly higher than Catalonia as a whole (7.7%). This level of mobility (also found in the Metropolitan Area) can be explained from the perspective of...
of two factors. Firstly, due to the small percentage of the population who claim that they make so many journeys on the survey’s reference dates (7.0% on weekdays and 20.4% on weekends). Secondly, due to the high averages for journeys made by the mobile population: 3.77 and 3.12 on weekdays and weekends, respectively, which are above the averages for Catalonia as a whole (3.51 and 2.48, respectively) with Alt Pirineu i Aran being the only other region with figures above this average for Catalonia.

The reason behind this high level of mobility in Camp de Tarragona is unlikely to be determined by one single cause; possible causes could be factors such as the different characteristics of the mobile population or the distinctive characteristics of the coastal front which facilitate a high degree of mobility among its residents. The data given below, which breaks mobility down according to very basic categories, should help to shed light on these questions.

2.2. Motives behind mobility

The data given below in figure 2 show how the reasons for making journeys vary significantly between weekdays and weekends. It shows that mobility is more evenly distributed among the four fundamental motives given on weekdays, to the degree that all four are close to a quarter of the total, allowing for the slight predominance of personal mobility and the subsequent journey home over occupational mobility.

Table 2 provides a more detailed breakdown of the motives behind mobility: in the occupational category the predominant motive is access to the work place, while in the case of personal mobility, most journeys cover short distances and less time is spent travelling (e.g. daily shopping, accompanying children or elderly persons and leisure activities).

However, on weekends the panorama changes radically. Occupational mobility accounts for less than 10% of the total (including the return trips), while the rest are journeys for personal motives. We also find considerable variations in the breakdown of personal mobility for, as, in this case, there is not such a clear-cut restriction to the time/space dimension of mobility: the predominant activities are leisure pursuits, going for a walk or visiting friends or family, for which time and space considerations are not so critical.

Finally, comparing the impact of personal and occupational journeys with the subsequent return trips, we obtain an approximate measurement of the pendular dimension of mobility: figures close to 50% indicate a high rates of swing, and as we move below this figure there is a higher rate of combining journeys (and the motives behind them). The results from the data show a marked rate of swing (in the order of 47%), which shows that people take advantage of journeys to combine motives for travelling (daily shopping trips, pick up the children from school, etc.) before returning home.

2.3. Principal means of transport

As can be seen in figure 3 below, in Camp de Tarragona the principal means of transport is a car, for both weekdays (47.7%) and especially on weekends (56.3%). The majority of the remaining journeys are made by non-motorised means (46.4% and 40.2%, for weekdays and weekends, respectively), to the degree that figures for public transport use are, unfortunately, nominal (5.9% on weekdays and only 3.4% on weekends). Needless to say these figures are cause for concern considering the impact on the environment, cost in terms of financial outlay and other related issues such as safety (road accidents) and road congestion. This is even more worrying if one takes into consideration that the average number of people travelling in a car / motorcycle is very low: 1.21 for cars / 1.09 for motorcycles on weekdays, and 1.41 / 1.07, respectively, on weekends. These data illustrate the direction future territorial planning and transport measures must follow to provide sustainable mobility.

Identifying and distinguishing the main factors which citizens take into account when they choose one transport mode or another is a complex task, as a wide range of personal motives overlap, although the SDM does allow for a synthetic approach. The main argument given for using a privately-owned vehicle is not the comparative advantages over other transport means (convenience, comfort and savings in time), but rather the lack of public transport alternatives or the infrequent runs of existing services.

So, according to these data, the main reasons limiting the role of public transport in Camp de Tarragona are effectively the lack of service routes and the infrequent runs of existing services. As regards this issue, the Consorci del Transport del Camp de Tarragona set up in 2003 and has to establish itself as a key figure in the integrated planning, extension and management of the public transport infrastructures for this area. This Consortium is one of the Consells Territorials de la Mobilitat set out in the Llei de mobilitat of 2004, and comprises the Generalitat’s Department for Public Works and Territorial Policies, along with the town councils of Tarragona, Reus and Valls. So, we shall have to wait until the measures adopted by this Consortium allow public transport to play a more leading role in the daily mobility of the resident population of Camp de Tarragona. These measures include services such as setting up their own local train network, with train-trams linking the main urban areas, rationalising public transport services along major roads and an integrated fare for these services.

Coming back to the comparative analysis between weekdays and weekends, what are the reasons behind this exodus towards private transport means on weekends? The answer clearly lies in existing associations between the transport means used and journey motives. A simple cross reference between these two variables illustrates how public transport only has a minor bearing on occupational mobility (7.8%), and so the lower figures for work-related journeys on weekends can only mean that it plays an even smaller role (figure 4).

In the case of personal mobility we find a similar tendency where the figures for journeys made on foot or by bicycle fall (from 55.8% to 42.5%) in favour of using a car (rising from 39.9% to 54.2%). One needs to view this fact from the perspective of those types of journey which make up the majority for each case: as stated earlier, journeys on weekdays usually tend to be shorter in terms of time taken as destinations are close to the home (daily shopping, etc.), and can be made walking or via public transport; however, at weekends this time-space constraint is less rigid and so the increase in distances covered and time needed for journeys means greater use of the car.

A more detailed breakdown of transport means (see table 3) shows that, from among the available public transport options, the bus (urban, inter-urban or school busses) is the main mode, with rail services following a long way behind. The lack of other public transport means in Camp de Tarragona is explained by the fact that all the journeys made by residents in the study area are taken into consideration, even if the trajectory goes beyond this area. By way of contrast, the car is by far the principal private mode for journeys, accounting for close to 94% of the total for this category on weekdays and 96% on weekends, with motorcycles playing a very minor role.

2.4. The time dimension of mobility

The time dimension of mobility breaks down into two facets: the average duration and the hourly distribution of journeys during the day. I would now like to take a look at these individually.

Average duration

The average journey time allows us to approximate the time people spend travelling on a daily basis.

As we have seen for many aspects of mobility, weekdays and weekends are important variables, and the average time spent travelling is governed likewise: 16.63 minutes on weekdays, but which
increases to as much as 22.83 minutes on weekends. The main factors behind this significant disparity are linked to the type of journey undertaken according to weekday or weekend and the motive for the journey, so at this point I would like to look at these in more detail.

The first factor which explains the longer travel time averages on weekends is distance: distances travelled on weekdays are much shorter than on weekends. Unfortunately, specific data regarding distances travelled are not available at the moment, so to illustrate this I have divided journeys as follows: intra-municipal (origin/destination within the same municipality, regardless of whether this municipality is the place of residence of the individual under study); or inter-municipal (origin/destination correspond to different Catalan municipalities, meaning travelling longer distances which take longer). Here, the data provide a very clear picture: while on working days nearly three quarters of the journeys are intra-municipal (72.5%), this percentage falls to almost two out of every three on weekends (62.6%).

Obviously, this difference is determined by the panorama of travel motives. To begin with, journeys on weekdays are governed by strict time constraints, to the degree that there is a ceiling beyond which journeys are no longer feasible on a daily basis. This goes a long way to explaining why the majority of journeys are intra-municipal, both in the case of travelling to work/place of study as well as travelling for personal motives. Another factor we need to bear in mind regarding the different motives for travelling, is that longer journey times are likewise determined by the characteristics of personal mobility on weekdays or weekends, which, as we know, account for over 90% of the total. While the majority of weekday journeys are governed by space-time proximity (daily shopping or accompanying others —children or elderly), on weekends the predominant motives are much more flexible in terms of time: leisure, taking a walk or visiting friends or family (see table 2).

Hourly distribution of journeys

The hourly distribution of journeys differs significantly depending on the day of the week: on weekdays this is closely bound by start/finish times for work and school/college, while on weekends we can see a more even and homogenous pattern throughout the day.

As can be seen in the first graph of figure 5, mobility on weekdays is governed by three peak hour blocks or moments of maximum concentration of journeys. First, we have work/study start times, concentrated between 7:00 and 10:00 a.m., which account for close to 350,000 journeys (18.9% of the daily total). Work/study finish times, however, are more staggered: we have the first peak at midday (from 1:00 to 3:00 p.m. —14.2% of journeys) and a second in the late afternoon-early evening, which is more spread out as it covers a wider range of hours (from 5:00 to 8:00 p.m. —23.6% of daily journeys).

As stated earlier, the hourly distribution of journeys throughout the day is closely governed by work-related mobility. In fact, if we focus on commuting alone, we can see that almost half (approximately 200,000 —46.2%) take place between 7:00 and 9:00 a.m., while the second peak, related to starting alternative work shifts, takes place around 2:00-4:00 p.m. (20.3%).

In contrast, personal mobility reveals a completely different distribution throughout the day, and is, generally speaking, more flexible. Here, we can see two time peaks of greater intensity: mid-morning (between 9:00 and 12:00 a.m. —27.2% of the journeys) and in the afternoon (between 4:00 and 8:00 p.m. —39.7%). As one might imagine, this time distribution is closely regulated by opening hours for commercial centres and services.

As regards weekends (second graph of figure 5), the significantly higher number of trips made for personal reasons (and subsequent journey home) provide us with a very different hourly distribution compared to weekdays. This means that we cannot speak of peak hours in the strictest sense, but rather two wide time blocks which include the mid-morning (10:00 a.m.-2:00 p.m.) and the afternoon (5:00-9:00 p.m.), accounting for 32.6% and 29.3% of journeys, respectively. Another difference regarding mobility on weekdays is the importance of journeys made during the late evening/night/early morning (between 11:00 p.m. and 5:00 a.m.): which on weekdays account for 21.1% of the total compared to 5.6% on weekends. This clearly reflects hourly patterns related to leisure activities, and the majority of these are return journeys related to personal motives.

If we focus on the hourly distribution of mobility according the transport mode used on weekdays (first graph in figure 6), two very different behaviour patterns can be seen. On the one hand, use of public and private transport follows a very similar pattern, governed by the time for starting work/study and the corresponding journey home (with the corresponding peak hours in the morning and in the early evening). On the other hand, the hourly distribution of journeys made walking confirms that this is the majority mode for personal mobility, and there is a peak between 8:00 and 9:00 in the morning related to school start time.

As regards weekends (second graph in figure 6), if we look aside the relative figures for each mode, we can see that there is no difference in their hourly distribution when it comes to journey start time: the low and peak hours for each of the modes are the same.

2.5. Differential mobility according to socio-demographic characteristics of the population

The data used so far refer to the population as a homogenous group, without allowing for socio-demographic considerations. Nevertheless, mobility patterns vary according to social group, which is why I would like to include a short section here which briefly outlines this dimension. By way of illustration, the data given below refer to two different aspects: firstly, the concentration of mobility (given as the average number of daily journeys —table 9), and, secondly, the distribution of mobility according the motive for the journey and the transport mode (tables 10 and 11).

In more specific terms, the population has been broken down according to three variables: gender, age, in four groups (4-15, 16-29, 30-64 and 65 +); the combination of these two variables; and professional standing according to six categories (student, non-remunerated domestic work, retired, pensioner, employed and unemployed). Based on these socio-demographic variables, the main results were as follows:

Gender. There is no clear mobility pattern governed by this variable, since the results vary according to day of the week: on weekdays the average number of journeys for the male population (3.48) is slightly lower than for the female population (3.53), with the inverse situation on weekends (2.68 and 2.28, respectively). If we focus on the distribution of mobility according to motives, the figure for occupational mobility for the male population is higher than that for women (49.4% and 35.4%, respectively). This is mainly explained by the fact that more men are formally employed while women are responsible for domestic tasks and taking care of the children. As regards mode of transport used, the motivation for female mobility (very often shorter distances) means that they mainly resort to non-motorised or public transport means.

Differences between male-female mobility patterns are significantly minimised on weekends since occupational mobility practically disappears, while other reasons for mobility are generally attributable to family-oriented journeys.

Age. Generally speaking, the average number of daily journeys on weekdays decreases as we move up through the age groups. The explanation for this lies with the relationship between age and occupational mobility, which is illustrated by the two age groups at either end of the scale: while practically the entire population below 16 need to make at least one journey to school etc.,
the figures for obligatory daily mobility for the 65+ population are negligible, mainly because they are no longer active in the formal employment market.

Turning to the modes of transport used, the young/adult age group (16-64) is the one which makes most use of a privately-owned vehicle. This tendency is lower in two cases: the youngest age group, because the majority of those who are 16 or younger do not hold a driving licence; and the oldest age group who have a lower incidence of car ownership due to the generation they were born into.

Professional standing. What has been observed regarding the age variable is also applicable to professional standing, given the particularly close correlation between these two variables: generally speaking, the population actively employed or studying are much more mobile than the population who are not actively employed in the job market. The one exception to this tendency is the case for those whose main daily task is taking care of the home. Their level of mobility is close to that of the actively employed population, since they are responsible in the main part for reconciling the demands of domestic tasks and taking care of the children which, by nature, demand a high level of personal mobility.

As regards professional standing, the mobility pattern for the population formally employed is very different from the rest, in that they are the only social group whose main transport mode is a privately owned vehicle to the detriment of walking.

3. Territorial dynamics

Finally, with an eye to the implementation of town and country planning policies, one of the most interesting findings in this study on mobility is the analysis of mobility flows based on the matrices of origins and destinations. Therefore, the reason for including this short section is to offer some brief observations concerning the territorial dynamics of Camp de Tarragona. Knowing what use the population make of this territory beyond the home is fundamental when it comes to implementing policies, not only to cover transport needs but also housing, accessibility and locating businesses.

3.1. Overview of Camp de Tarragona

Regardless of where they live, the resident population of Camp de Tarragona make a daily average of 1,915,632 journeys on weekdays and 1,559,470 on weekends. But beyond this overall fall in the number of weekend journeys, what is even more interesting is to see that on weekdays the percentage for internal journeys in the study area is 92.4% compared to weekends, 79.7% (see figure 7). This further proves the point made earlier that mobility on weekdays covers shorter distances (getting to and from work etc.), while on weekends most mobility is linked to leisure and implies travelling longer distances. The clearest example of this are journeys to a second home, where their location is not determined by criteria such as proximity or accessibility, but rather by the natural setting or cultural considerations.

Focusing on journeys beginning within or from outside Camp de Tarragona, one can see that the most important mobility flow is to and from the Metropolitan Area: on both weekdays and weekends, this is the origin and destination of close to 70% of inter-county journeys. Clearly, work and study related mobility on the one hand, and cultural / leisure options on the other, are the main factors behind this major mobility flow. This explains why 53.4% inter-county journeys on weekdays are work-related, compared to 42.0% for intra-county flows. In contrast, on weekends figures fall to 38.6% for intra-county flows compared to a mere 2.9% for inter-county flows.

As regards remaining origins / destinations, once again these are determined by proximity: the second highest inter-county flow is with the Terres de l'Ebre, followed by journeys to / from the Terres de Ponent and the Comarques Centrals (Central Regions), with only minor flows to / from the Alt Pireneu i Aran and the Comarques Gironines (Girona Regions). However, the slight increase in importance of the latter on weekends, seen alongside figures for journeys beginning / ending outside Catalonia (3.78%) indicate that these territories are used primarily for leisure pursuits.

Finally, there is an apparent paradox when we turn to the modes of transport used according to the type of journey undertaken: for inter-county journeys (by default, longer distances), public transport use is higher (21.4% on weekdays) compared to intra-county journeys (4.9%). I say a paradox because, as we know, this is the slowest transport mode and the least efficient in terms of time. So, what is the reason behind this apparent contradiction? The answer once again lies in the provision of public transport services in the study area: routes connecting with the rest of Catalonia (particularly with the Metropolitan Area, the main origin / destination point) are well serviced by a rail network (the local train service from Baix Penedès and the regional train services from the majority of the rest of the area), so they are an attractive alternative to using a car, a fact which cannot be said of intra-county journeys in Camp de Tarragona.

In short, and at the risk of oversimplifying mobility patterns for Camp de Tarragona as a whole, one can say that on weekdays those commuting beyond or from outside Camp de Tarragona mainly use public transport. The opposite is the case on weekends: those who stay do so because of work, much higher in number than those who make inter-county journeys, where there is a higher degree of personal mobility (tables 8 and 9).

3.2. Analysis by region

The self-containment average for Camp de Tarragona is 85.9% on weekdays. However, this overall figure does not let us see that in fact there are two different territorial patterns which derive from two quite different situations, mainly governed by the Tarragonès region because of its relatively dense population.

First we have Tarragonès, the most self-contained region (89.3%) as here there is a large and concentrated job market, which explains why the majority of its population do not commute beyond its boundaries and also why it is the destination of a significant number of residents from other regions with lower levels of self-containment (the closer they are to the city of Tarragona, the lower their level of self-containment);

Secondly, the other regions also show high levels of self-containment, due to a self-contained labour market at a municipal level with no important inter-county relationships. This is particularly evident in the Priorat region, with a self-containment level of 81.1%, clearly influenced by its predominantly rural population.

The territorial pattern is, however, the opposite on weekends and public holidays: on these days it is the Priorat region which has the highest level of self-containment, practically identical to weekdays (82.1%), followed by Tarragonès (81.2%). Accordingly, in figure 8 we can see a general decrease in self-containment levels (79.2% for Camp de Tarragona as a whole) which clearly illustrates the major spread of mobility flows on weekends.

Table 10 shows the internal points of origin / destination for Camp de Tarragona at a regional level. In addition to the fact that internal mobility ranks first for the majority of the journeys here (as seen by its level of self-containment), we can see a general tendency whereby on weekdays the Tarragonès region ranks second as a destination point, obviously due to the role of its capital city, Tarragona, as an important job market and place to study. This, however, is not the case for Conca de Barberà and Priorat, the two regions furthest from Tarragonès, where the corresponding regions that rank second as destination points are, Alt Camp and Baix Camp, respectively. When it comes to weekends, Tarragonès ranks as the second destination in order of importance for all journeys recorded throughout the regions covered by this study.
As regards reasons travelling and transport mode used, two conclusions can be drawn: first, for inter-municipal journeys, and, second, the latter are mainly made on foot or by bicycle, while a privately-owned vehicle is clearly the majority choice for inter-county journeys. The only other noteworthy comment here concerns the degree of public transport use for journeys with Alt Camp as the point of origin / destination.

3.3. Analysis by municipality

Before beginning my analysis of patterns at a municipal level, it should be noted that the limitations of the sample do not allow for a breakdown of the determining factors at a municipal level, so by necessity the data given below have had to be added at a regional scale.

As might be expected, general figures for municipal self-containment are lower than those for regional self-containment, following, and sometimes highlighting the territorial patterns explained earlier. Accordingly, for Camp de Tarragona as a whole, figures for municipal self-containment are 71.3% on weekdays and 61.1% on weekends.

At a regional level, Tarragonès is the area with the highest level of municipal self-containment, influenced by the capital city, Tarragona, even higher than the most rural regions (Conca de Barberà or Priorat) which tend to be quite dependent on their respective capitals as they are the focal points for a significant number of jobs and cultural / leisure activities.

4. Conclusion

As stated at the outset, this study is intended to be descriptive, determined by the fact that this is the first time data about habitual mobility patterns for Camp de Tarragona has been available.

Nevertheless, this analysis has made it possible to identify certain tendencies, behaviour, characteristics and territorial distribution related to mobility. In turn, these have major implications for planning, drawing up and managing mobility policies as well as for new communication infrastructures. I would like to underline the two which, in my view, prove to be the most relevant.

First, regarding the daily mobility of the resident population of Camp de Tarragona, one can observe a clear and manifest dependence on privately-owned vehicles, which from the perspective of sustainability is excessive, and to the detriment of the meagre availability of public transport. The lack of public transport services and infrastructure would appear to be the key factor, since citizens claim that the main reasons for using their own vehicle are the shortcomings of public transport alternatives. If we also add the low averages for numbers of people travelling in privately-owned vehicles, the consequences for the environment, society and the economy are easy to see. Therefore, the implementation of certain awaited measures, such as creating a network of trains-trams taking advantage of existing rail infrastructures and complementing them with new services, integrated management of urban and inter-urban busses networks, and integrating fares for all these services, can only improve the present poor state of public transport.

Second, the distribution of mobility, combined with the analysis of the underlying reasons, allows us to see the territorial associations of Camp de Tarragona from a functional perspective. In effect, according to the patterns and tendencies that have been identified here, we could say that Camp de Tarragona demonstrates characteristics very similar to those of a consolidated metropolitan region. One of the main characteristics of mobility is proximity, and could not be otherwise if one takes into account that travel time has to be short for it to be feasible on a daily basis. However, one can see certain territorial dynamics which clearly show the territorial associations around the central city (Tarragona) and an inter-urban polycentric network (in essence, Reus and Valls).

But, this metropolitan phenomenon cannot be said for the entire Camp de Tarragona territory, and so in the strictest sense the “hard core” would only comprise the Tarragonès, Baix Camp and Alt Camp regions. By comparison, we first have the rural characteristics of Priorat and Conca de Barberà: in addition to being further away and less accessible to regarding the capital city means that they are more self-contained and autonomous. By way of further contrast, the unique features of the Baix Penedès appear to make it a kind of “frontier region” between the metropolitan areas of Barcelona and Tarragona. Clearly the existing provision of a connecting local train services with the Metropolitan Area is one of the key determining factors for its ambivalent role: for example, closer to that of Garraf than Conca de Barberà.

It is clear that the SDM is an invaluable source of information which will contribute to proper adequate territorial management and planning for Camp de Tarragona and the rest of Catalonia.

DAILY MOBILITY IN TERRES DE L’EBRE

Daniel Polo

The following text is a brief draft of the mobility in Terres de l’Ebre nowadays, that is, the amount of trips made for any reason and with any mean of transport, on the basis of the information offered, for the first time, by the Survey of Daily Mobility 2006.

Thus, this text not only describes the Survey of Daily Mobility’s main results, but also notes some practical conclusions on the transportation planning of this region, which is our final aim when talking about mobility. It can happen that, by providing different readings from the ones traditionally used, thanks to the Survey of Daily Mobility, we will also have a different point of view. In the last section, these last suggestions will be noted in accordance to the objectives stipulated in Act 9/2003 on mobility, an instrument that shares with the Survey of Daily Mobility the fact of being relatively new and also pioneer in some of its approaches.

1. Basic characteristics of mobility in Terres de l’Ebre

Residents inhabiting in the municipalities of Terres de l’Ebre travel an average of 581,128 trips on a working day and 411,687 on a bank holiday or weekend. Taking into account that the number of inhabitants in the region was 171,248 the year the survey was made, these data gives an average result of 3.39 and 2.40 journeys per person and day, respectively.

With the aforementioned data, two comparative questions may arise and they will help structure the analysis of all the data that the Survey of Daily Mobility provides. Firstly, how can the significant difference between the amount of trips made on a working day and on a weekend/bank holiday be explained? And secondly, referring specifically to mobility in Terres de l’Ebre, is it very different from the mobility in the rest of Catalonia?

Taking the first issue into account, it can be observed that mobility on a weekend/bank holiday is nearly 30% less than on a working day. However, this decrease is not homogeneous, it flows in relation to the mean of transport used (depending on the

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1 General Town and Country Planning Project for Catalonia.
2 Although this study focuses on Camp de Tarragona, in order to provide a comparison and broader context, I have made some short references to mobility models for Catalonia as a whole. For this purpose statistical data has been used which are available from the following web page: http://www10.gencat.net/gtos/AppJava/cat/areas/mobilitat/observacionmobilitat/ emq2006/emq_2006.jsp.
3 Transport Consortium for Camp de Tarragona.