

LTP4 Comparator Case Study – Dijon (DRAFT)

1. Context

Background

Dijon is located in the Burgundy prefecture of the Côte-d'Or department and Bourgogne-Franche-Comté region. As of 2018, there were 160,186 residents in the city itself. Including surrounding towns and villages in the wider area this rises to 259,000. Dijon is very compact, with a population density of 3,935 inhabitants per km², 60% of whom live within 3 kms of the inner city. The city centre is a UNESCO World Heritage Site.

Dijon's layout and geography are similar to York:

- In a large plain with river running through the centre and a large lake, similar in relative size to the Ouse Ings, upstream of the centre.
- Major rail station on a bending site close to the centre of the city with junctions to the south.
- Circa 300km from Paris, similar distance as York to London. TGV express trains take 1h40 from city to city, within 7 minutes of the fastest trains from York to London.

Like York, Dijon is an historic transport hub and centre of educational excellence. A tourism hotspot, it is visited by circa 3 million visitors and hosts several major festivals each year. It is known for its architecture and is adjacent to some of the best vineyards in France. The similarities continue with a cathedral, major museums, a theatre and opera house. There are extensive botanical gardens and parks.

Governance

This section is copied from *Eur. Transp. Res. Rev. (2017) 9:7, Appropriate National Policy Frameworks for Sustainable Urban Mobility Plans, May et al.* Additionally, reference to other legislation is made in section 3.4.

Useful background, but needs a good edit

National policy In France

Plans de Déplacement Urbains (PDU) – the French version of Sustainable Urban Mobility Plans (SUMP) - were created by the 1982 domestic transport orientation law. However, their development really started with the 1996 air quality law, which made them compulsory for urban areas of over 100,000 population. Since then, the regulatory framework has been extended to improve the compatibility with land planning and other planning documents (regional land use plan, air protection plan), to extend their objectives (accessibility for disabled people, new mobility forms such as car sharing and electric vehicles) and to better define the process itself (environmental assessment, revision procedure).

Since 2014, a series of five new laws impacting urban mobility planning have come into effect. At the national level, the launch of stage 3 of decentralisation emphasises the roles of regions and associations of cities rather than departments and stand-alone cities. These laws also support energy transition in urban mobility via the promotion of low emission and electric vehicles, intermodality and active transportation, and they extend the concept of mobility plans to non-urban areas. A large range of actors are targeted: regions, departments, local authorities, cities and enterprises (with compulsory mobility plans for enterprises over 100 persons).

Decentralisation

The recent series of laws enhances the role of cities and regions, but the scope of actors' responsibilities remains complex. Roads are the responsibility of cities, department or state, depending on their status. Parking is currently shared by cities (public and on-street parking) in association with private sector, regions (regarding intermodality) and state (law enforcement). Local authorities are responsible for urban public transport, which is specified by the local authority but provided by the private sector under a franchise. Local rail services are operated by the national operator SNCF under contracts with the regions, while national rail services and long-distance coach services are open to competition in the private sector. Cities are also in charge of active transportation, car-sharing and electric mobility, but with private sector involvement.

Support for SUMP

The support from national government to cities includes guidance on methodology, the state of the art, and a catalogue of measures (see www.certu-catalogue.fr, the on-line library disseminating free and charged documents). Ministry services are also involved in the PDU process itself at different stages. At the outset, they introduce cities to the PDU principles, including the legal framework, objectives and process. As a statutory consultee they are involved in the PDU process and at the end they give an opinion on the PDU decided upon by the organizing authority. Eventually, they also have to do an a posteriori legal check once the PDU is about to come into force.

Participation and political support

The political support for PDUs is strong from both the national level (as shown by the recent series of laws), and the local level. Almost all cities over 100,000 inhabitants have a PDU or are engaged in the process of having one, which is compulsory, and numerous smaller cities have freely engaged in the mobility planning process (producing either a PDU or another form of document). Therefore, the challenge with participation is now not in the political support, but rather in the involvement of citizens in the process to improve the effectiveness of the PDU. The legal framework requires nothing more than a final public inquiry. Some cities have therefore initiated more participative approaches to create a real dialogue with citizens throughout the process.

Laws and regulation

The French legal corpus is now substantial. It requires the effective involvement of all actors (state, regions, local authorities, private sector). It enables the support for national objectives (e.g., pollutant emission reduction) at the local level either directly or through national and regional frameworks imposed on PDUs. However, the proliferation of planning documents demanded may cause complexity in the cities' planning processes. The recent laws, proposing a first merger between mobility and land use planning, are an attempt to reduce this complexity.

Pricing and taxation

National government determines vehicle and fuel taxes, with a tax incentive for diesel compared to petrol. Local authorities define parking charges and set the urban public transport fares. Until 2005 the government could define a maximum annual percentage increase for social reasons. Since 2005, its action has been limited to fares for disadvantaged persons. Despite this decrease in price control, the average fares have decreased between 1995 and 2012. This is a strong signal of the will to increase the use of public transport. Today, urban

public transport pricing follows two leads: social pricing to ensure that low-income persons can access mobility, and intermodal pricing to support the use of several modes and networks.

Finance

Cities are mainly financed by national government, fares, charges and local taxation. Local taxation includes a tax dedicated to public transport funding, called the 'versement transport'. This tax, paid by firms with ten or more employees, finances 40% of the public transport budget, which exceeds the contribution from fares. Transport infrastructure management is financed by the corresponding responsible authority (either public or private), while the funding of new infrastructure involves national and local authorities, potentially with an involvement of the private sector.

Monitoring and research

At the national level the global state of progress of PDUs is regularly monitored. Laws require cities to assess their PDU every five years and, if needed, to update it. However, the Ministry has only limited capacities for active monitoring. Moreover, it only has a few sanctions available for those cities which do not monitor and update their PDUs; these include programmes for financing public transport infrastructure, where cities are required to have a PDU to be eligible. As a support for cities in their mobility planning, the Ministry continuously finances methodological, state-of-the art and assessment studies, e.g., via the creation and the financing of Cerema, a public body which supports national and local authorities in the field of sustainable development. This enables cities to implement more effective PDUs and provides feedback from local innovations to the central Ministry.

Thumbnail of current transport provision

To be added

2. Transport Planning

Local transport plans

Dijon adopted its latest transport plan (the metropolitan project), in November 2017 but, it is already a city at an advanced stage of decarbonising transport and increasing use of both public transport and active travel modes. By any measure it is an excellent example of what can be achieved with vision and purpose.

It has actively engaged and included surrounding towns and villages as fundamentally important contributors to the success of the project, something to which York should aspire irrespective of the outcome of the present local authority review process.

Primary objectives of the Plan

Need to add this

Strategic approach

Covered below – need to separate out

Principal policy measures

Development

Like most cities, Dijon had suffered from increasing congestion, air and noise pollution, insufficient bus provision on a road network increasingly clogged with cars. In 2008, the regional assembly of Greater Dijon voted to move to an integrated, multi-modal, greener and more active solution including building a tram network of some 20km on two lines, intermeshed with improved bus services employing 102 hybrid buses, and adding 36km of segregated bicycle lanes with 7 bike stations.

The tram system was inaugurated in late 2012, on time and within the €399m budget, assisted by the decision to co-operatively develop the system with Brest in Brittany, saving 25% on the purchase price of the tram stock (32 sets for Dijon).

The goals of the new system were to desaturate the transport system in the city and achieve significant modal shift from the car by providing a meaningful and attractive alternative proposition that connected previously neglected parts of the city and enabled fast, safe and affordable links between all areas including universities, sports facilities, enterprise zones and commercial centres. Within 3 years of the new system being inaugurated, there was a 40% increase in journeys to 47 million.

Since the start of 2017, Keolis has managed all mobility services: bus, tram, bicycle and parking under the operating name of Divia Mobilités. Ticketing is simple with a single, contact-free card that can be used on all public transport services, including shared bike hire. With much of the city centre pedestrianised, accessibility is provided by free, electric shuttles within the core of the city (see below left). Further afield, between 2017 and 2019 €15m was spent upgrading 140 bus stops and installing bus priority lights at 120 signalised junctions.



Cycling

Dijon has developed a network of segregated cycle lanes in the city and, in the wider area, a total of almost 300km of safe lanes for bikes. From mid-2019 to the end of 2020, 1900 bike park arches were installed in the city bringing the total to over 5000 with more to follow. In addition, 11 secure bicycle shelters have been set up in connection with the tramway (above right). These 'Divia VéloParks' allow cyclists to park their bikes in covered, lit and secure shelters, under camera surveillance. The use of this service requires a monthly subscription of €1 or annual subscription of €10 (the service being free for certain DIVIA subscribers).

The Car – Differently'

Through-city traffic was banned in 2013. Motorists in Dijon are encouraged to use their vehicles in other ways: park-and-ride facilities make it possible to avoid entering the city with a car; car-sharing is a new solution making cars a service which can be used according to demand; carpooling allows a motorist to take other passengers on the same journey, which lightens motorway traffic and allows transportation costs to be shared. The car-sharing

service offers various car types as options to optimise the customer offering: city cars, medium and large vehicles are available and the service has recently been expanded to include minivans. Information on prices, card and ticket orders, points of sale, network maps, and park and ride facilities are on the Divia website <https://www.divia.fr/bus-tram>.

Walking: 'The Street Code'

For several decades, most French cities, including Dijon, have undergone changes to enhance pedestrian safety, calm traffic and better share public space.

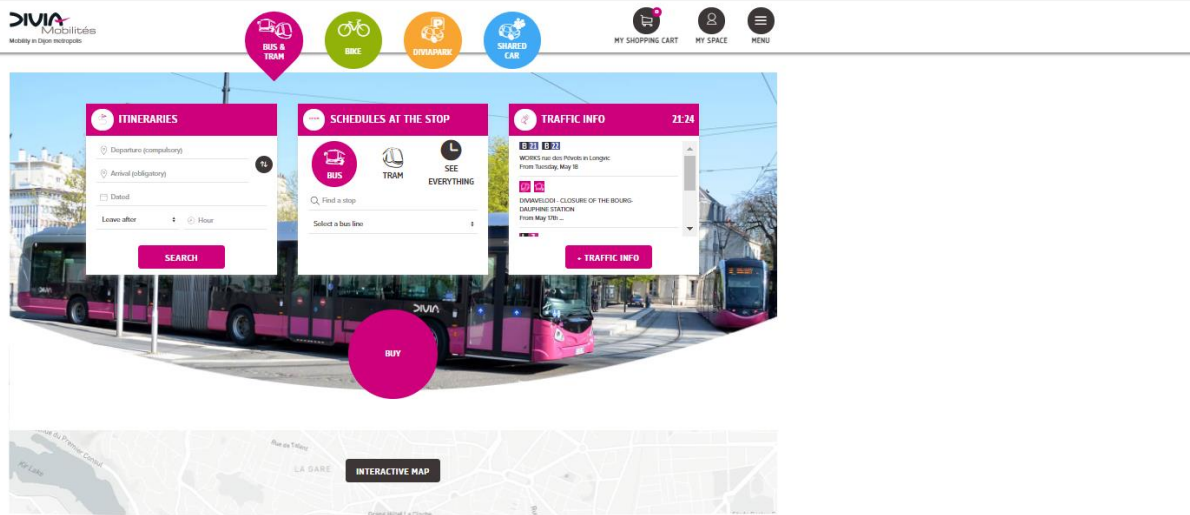
These changes involved questioning the historical conception of French urban development. It rebalances the uses of public space in favour of increased quality of life and active transport modes such as walking and cycling. In 2006, France initiated a consultation process prior to an adaptation of its highway code which was until then largely beneficial to cars, to the detriment of other transport modes.

The 'street code' was initiated in 2008 (*Decree No. 2008-754 of July 30, 2008 – there have been more since*) through several measures aimed at implementing safe spaces for pedestrians and cyclists in particular:

- Prioritising vulnerable users.
- Redefinition of the pedestrian area and 'zone 30'[km/hr].
- Introduction of the concept of meeting areas / plazas.
- Adopting two-way cycle paths within 'zone 30' and plazas.
- Creation of traffic lights for cyclists.

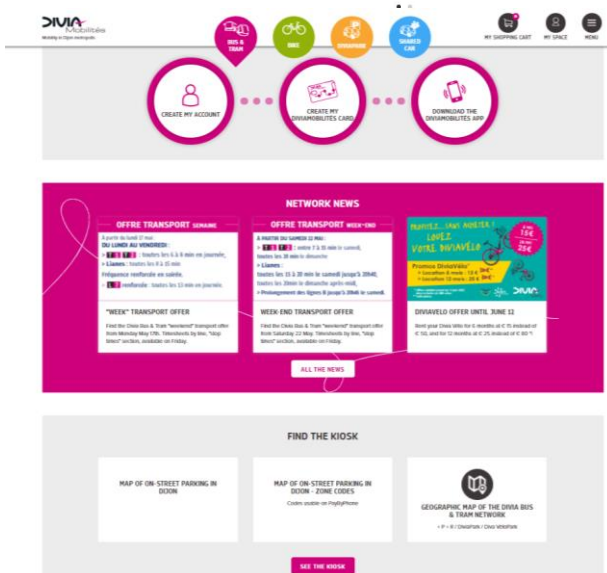
Ease of Access

A key feature of Dijon's transport infrastructure is its operation, like TfL in London, by a single organisation, Divia. All services are accessed via a user-friendly website. Like most of the city web pages, all main content aside from downloadable files is available in English. The services are very easy to access and navigate, along with interactive maps that assist in local travel planning for things like hiring a bike from a particular tram station. The main page is copied below. Users can switch between transport mode sites with a single click on coloured icons at the top of the main page.



PUBLIC TRANSPORT: BUS & TRAM IN DIJON

THE BUS & TRAM IS ALSO ...



Modal Share

The most recent data available is from a survey completed between December 2015 and March 2016. More recent data would be preferable, especially when considering the 40% rise in PT use between 2012 and 2015 and probable subsequent trend.

- 20% of all metropolitan area residents (wider city region) use PT daily. 53% favoured car travel, tram/bus/train accounted for 13% of journeys (12% Strasbourg, 10% Montpellier for comparison).
- Walking and cycling accounted for 33% of journeys.
- 57% of all journeys were less than 3km, 25% less than 1km.
- Purpose of journey: work 22%, shopping 18%, study 13%.
- Average distance of each trip made: 3.7km. Residents of wider city region make 3.6 journeys each day for a total average distance travelled of 13km, 18 minutes per trip for a total of 54 mins travelling per day.

- Car ownership: Average number of cars per household in city region: 1.05. 23% of households own no cars and 25% own fewer than 2 cars.

Key performance measures

To be researched.

Provision for disabled travellers

To be researched.

3. Relevance to York

Useful lessons and pointers

Dijon is very similar to York in terms of size, topography and geographical layout. It is a major seat of learning and a cultural centre. It supports a thriving tourist industry.

It has adopted many of the policies to which York aspires. It has largely pedestrianised the city centre but includes as part of its offering a free electric bus shuttle service within the central area, maintaining equitable access for all with improved access at a large number of bus stops and tram stations throughout the city.

Dijon's approach to the management of cars is an example York should aspire to follow. By offering a genuine and attractive alternative proposition to using a car, aligned with banning transitory journeys through the city, car use is decreasing and the modal share figures in 3.6 above are impressive, especially given the data is 5 years old.

Dijon's approach to the design of new developments and neighbourhoods is of particular relevance given the number of strategic sites envisaged in York's Local Plan. Three sites are of particular relevance:

- Heudelet 26: Close to the city centre and built on a former Army barracks site of 2.8 hectares, the development includes almost 300 homes, offices, shops and artists' studios. A potential model for the redevelopment of Imphal and/or Strensall Barracks.
- Via Romana: On the outskirts of the city, this 3-hectare site has 200 homes, 30% of which are affordable, 40% free-market and 30% low rent housing. Emphasis is on quality of life with priority development of walking and cycle routes; greening of roofs, facades and inclusion of communal vegetable gardens as part of the design.
- Garden City Maraichers: The following extract is from the website of the developers of this major new quarter for the city, which is similar in scale and distance from the centre as the proposed site between Escrick and Ricall.

"The Ecocity Jardin des Maraichers is structured around a central mall generously planted and accessible to all. This central axis will distribute all of the district's service roads made up of "pacified" roads where the car and the pedestrian share the space. A square is set up to the north, in the extension of the mall in order to liven up neighbourhood life. The latter extends to the foot of the old slaughterhouses converted into shops and housing.

This predominantly residential area (1,500 housing units in the long term) will also accommodate shops, services and offices. By offering a very wide variety of accommodation (from collective to individual grouped through intermediary, from studios to T6, "flats" and duplexes), the Ecocité Jardin des Maraichers is aimed at all types of public, whether families, the elderly or students. Thus, it will be possible to have a garden for accommodation on the ground floor or even a large terrace by living on the roofs.

The neighbourhood was designed to ensure the optimal orientation of the buildings. Thus, solar gain will be maximized in winter while the creation of wetlands will cool the neighbourhood in summer. This energy management will allow real cost savings for future inhabitants”.



Dijon has implemented a policy of shared heating networks for major new developments, with piping infrastructure installed alongside new transport links such as tram lines. Mainly sourcing sustainable fuels, the schemes typically save residents between 15-30% on average heating bills. In addition, the city is developing plans for local hydrogen production using electrolysis from renewable energy sources to produce fuel to power a new fleet of public transport vehicles. These two areas of policy are highly relevant to York as it builds LTP4.

Regeneration of previous industrial sites is another key similarity and opportunity for York to model and follow. This is becoming more relevant now as investment in significant new office developments is under review as work pattern change in a post-covid world. A key example of this in Dijon is the recently-constructed joint bus/tram maintenance facility, built on the site of former railway workshops. There is an opportunity for York to re-examine potential land use within former railway workshop land in York Central for such a purpose, retaining key connectivity and employment close to the historic industrial heart of the city.



Any aspects which make it less relevant to York

As York presently has no light rail system it cannot be directly compared to Dijon at present. That said, given the relatively recent construction and introduction of the network in Dijon, it can be seen as an example of what is possible to achieve in terms of modal shift and air quality improvements. By combining tram, eco-district development and networked heating solutions, Dijon set hard targets to meet “3 times 20” by 2020:

- Reduce greenhouse gas emissions by 20%
- Increase energy efficiency by 20%
- Achieve 20% renewable energies in our energy mix

Demonstrator new neighbourhoods

To be researched – and see above

Best practice in engagement and consultation

To be researched

Possible contacts

To be researched

Public Transport Operator <https://www.divia.fr/bus-tram>
City Authority Homepage <https://www.metropole-dijon.fr/Dijon-metropole>
Eco-city Developer Home <http://www.splaad.com/ecocite-jardin-des-maraichers-dijon>
City Planning, Travel, Housing homepage <https://api-carto.dijon.fr/plui/>