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# TRANSNATIONAL REPORT ON MOBILITY NEEDS AND BEHAVIOURS OF AIRPORT EMPLOYEES

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Employees' landside mobility needs &  
behaviours

Strengths, weaknesses and opportunities

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Written by SEA





# Table of Contents

<b>1. Introduction</b>	<b>2</b>
<b>2. Strengths</b>	<b>3</b>
2.1. Budapest Airport	3
2.2. Milan Airports	3
2.3. Warsaw Modlin Airport	3
2.4. Dubrovnik Airport	3
2.5. Vienna Airport	3
2.6. Poznan Airport	4
<b>3. Weaknesses</b>	<b>5</b>
3.1. Budapest Airport	5
3.2. Milan Airports	5
3.3. Warsaw Modlin Airport	5
3.4. Dubrovnik Airport	5
3.5. Vienna Airport	6
3.6. Poznan Airport	6
<b>4. Opportunies for development</b>	<b>7</b>
4.1. Budapest Airport	7
4.2. Milan Airports	7
4.3. Warsaw Modlin Airport	7
4.4. Dubrovnik Airport	8
4.5. Vienna Airport	8
4.6. Poznan Airport	8
<b>5. Conclusions</b>	<b>9</b>

# 1. Introduction

This document summarizes the main results of the analyses of employees' mobility needs and behaviours at each LAirA airport. In particular, it focuses on six territorial contexts and seven airports: Budapest, Milan (Linate and Malpensa), Warsaw Modlin, Dubrovnik, Vienna, and Poznan<sup>1</sup>.

The report relies on primary data collected by on-line surveys and in-person interviews with employees and on related analyses delivered by partners. The following Table reports information on the employee surveys' size and period at the LAirA airports.

**Table 1: Size and period of employee surveys**

Airport	Number of employees surveyed	Period survey was conducted
Budapest	415	February-March 2018
Milan	605 (355 Malpensa / 250 Linate)	July 2018
Warsaw Modlin	247	March-April 2018
Dubrovnik	150	January-February 2018
Vienna	965	2013
Poznan	134	February-March 2018

Source: LAirA project

This report aims to:

- extract key themes contributing to current mobility behaviours;
- inform the LAirA partners' future actions, based on understanding of the factors preventing sustainable solutions to commute to airports (e.g. public transport and shared mobility).

The report is structured as it follows:

- Chapter 2 (Strengths) details the main positive aspects identified by the employee surveys at each airport.
- Chapter 3 (Weaknesses) details the main constraints and disadvantages employees identify in sustainable mobility solutions to commute.
- Chapter 4 (Opportunities for development) summarizes the main development opportunities at each airport.
- Chapter 5 (Conclusions) includes some highlights on common elements across the LAirA airports with reference to potential future actions.

<sup>1</sup> The report does not include Stuttgart Airport as the analysis is not available at the date of drafting of this report.



## 2. Strengths

### 2.1. Budapest Airport

- 40% of the employees surveyed use public transport to commute.
- 24% of surveyed employees commute within 10km to the airport, while a total of 43% commute within 15km.
- Some benefits to commuters are in place.

### 2.2. Milan Airports

- A large proportion of surveyed employees have short commutes to the airports. At Malpensa, 36% of employees commute for less than 15 minutes, and a further 37% commute for 15 - 30 minutes. At Linate, 52% of surveyed employees commute for up to 30 minutes.
- Linate is a city airport, next the urban centre, and 28% of the surveyed employees commute by train, bus and metro.

### 2.3. Warsaw Modlin Airport

- A large proportion of surveyed employees live close to the airport. 32% of employees commute within 10km to the airport, while a total of 45% commute within 15km.
- The airport's employee car park is very close to the terminal building (100m). Employees surveyed perceive this as a positive, however it also incentivises commuting by private car.
- 58% of surveyed employees reported accessibility to the airport by car as "very good". They also reported the parking fare payment system positively.

### 2.4. Dubrovnik Airport

- About half of surveyed employees rank taxi services to and from the airport as "excellent". We understand this is a strength to develop share-taxi services.
- There is a general satisfaction with the quality of the road infrastructure for driving; this is in principle positive, but it may not ease behavioural change to sustainable travel modes.
- Commuting to the airport is about 25 minutes in low season from Dubrovnik (which is 20 km from the Airport).

### 2.5. Vienna Airport

- Employees of the Vienna Airport (or other companies located at the airport) reported that they can enjoy various monetary incentives for commuting to and from work.
- 25% of employees surveyed used public transport to commute to the airport.
- Many interventions were put in place since the survey in 2013; these concerned for example:
  - > the Airport connection to the ÖBB long-distance railway network and connection to the central train station of Vienna;



- > increased suburban trains frequency;
- > cycling facilities;
- > shared mobility services.

## 2.6. Poznan Airport

- The airport is relatively close to the city centre (10km).
- A large proportion of surveyed employees live close to the airport. 21% live within 5km, a total of 56% live within 10km, and a total of 80% live within 15km.
- 34% of surveyed employees use public transport for at least one leg of their commuting journey to the airport. This is a relatively high figure. For employees who live within the boundaries of the city of Poznan, this figure rises to 47%.
- The Poznan Metropolitan Railway will provide high-frequency connections to further afield areas of the region which currently have poor public transport options to the airport.



## 3. Weaknesses

### 3.1. Budapest Airport

- Employees who commuted by private car said that public transport was uncompetitive on travel time, comfort, and flexibility.
- 25% of the surveyed employees stop on the way to the airport; 50% of employees have a variable time in work end and approximately 30% in work start; this is in principle making a carpooling system more complex, unless a dynamic system is set-up.
- Road accessibility is restrained by congestion, railway track barriers and high travel times for employees commuting from the north side of the airport.
- There is little pedestrian and proper cycling infrastructure, creating a perception that cycling to the airport is unsafe.
- Shuttle services have bad reputation among employees.

### 3.2. Milan Airports

- About 80% of surveyed employees at Malpensa Airport and 60% of surveyed employees at Linate Airport commute by private car or motorcycle.
- About 95% of surveyed employees who drove to Malpensa Airport and 91% of surveyed employees who drove to Linate Airport commute alone.
- About 30% of surveyed employees travelling by car in peak hours have de-tours or stops along the journey, which is in principle not easing a car-pool scheme.

### 3.3. Warsaw Modlin Airport

- There is a high fragmentation in the trip origins.
- 49% of employees interviewed commute from far than 20 km one-way to the airport.
- Nearly 40% of respondents stop on their way to/from work; this is not an element easing car-pool schemes.
- There is a high private vehicle share (72% of current modal split - additional 15% travel with other staff).
- 41% of surveyed employees using the bus reported accessibility / frequency as “very bad”. Of those using the bus to commute to the airport, 26% report waiting more than 15 minutes at the bus stop.

### 3.4. Dubrovnik Airport

- There is a very high private vehicles' share (92% of current modal split). Most of these trips are less than 10km. Parking at the airport is free, incentivising car use.
- There is a degree of congestion on the road network surrounding the airport, however there is general satisfaction with the quality of the road infrastructure for driving.



- The terrain around the airport is not flat, making cycling challenging. There is also a lack of safe cycling infrastructure, such as cycle paths parallel to roads.
- 68% of employees surveyed agree that their mode of commuting is damaging to the environment. However, the majority of car drivers also said that alternative modes of transport are not favourable for their commute.

### 3.5. Vienna Airport

- 44% of surveyed employees have flexible working hours, 30% are shift workers. This is a challenge to develop car-pool schemes, unless they are based on dynamic systems.
- There is a high private vehicles' share (75% of modal split).

### 3.6. Poznan Airport

- Employees surveyed who commuted by private car identified public transport as being inconvenient, uncomfortable, and not reliable enough to use.
- There is a lack of dedicated bus lanes all the way from Poznan city centre to the airport, leading to slow bus journey times.
- There is a lack of segregated safe cycling infrastructure leading to the airport, putting commuters off from cycling even if they live less than 5km from the airport. Only 15% of employees surveyed have used the Poznan City Bike bikeshare scheme.
- Many employees who commute by private car have a travel time approaching 60 minutes each way.



## 4. Opportunities for development

### 4.1. Budapest Airport

- Employees surveyed identified shared taxi services and car-sharing as a viable alternative if suitable services were available.
- 24% of employees commute within 10km to the airport. This presents an opportunity for fostering soft mobility if suitable cycling infrastructure and facilities were created.
- A more detailed analysis of car-pool opportunities could be delivered, taking into account that time is a critical success factor in employees' travel mode choice and that affording car use was a critical element.
- There are margins to improve and enhance public transport and shuttle services.
- The Airport could support actions in cooperation with authorities to review benefits to employees.

### 4.2. Milan Airports

- Discounted season tickets for employees could encourage commuting by train to Malpensa (and metro to Linate once available).
- Linate Airport is 7km from Milan city centre and the Municipality of Milan is an important area for trip origins; this is an opportunity to foster soft mobility (in particular cycling). Employee campaigns and discounts (such as discounted bicycles or equipment) could encourage mode shift from car to cycling.
- 42% of surveyed employees at Malpensa airport and 38% of surveyed employees at Linate airport expressed interest in joining a car-pooling service. This is a major opportunity, given that the airports host over 20,000 employees. The provision of an Emergency Ride Home option would be recommended to reduce anxiety from potential car pool members.
- SEA could introduce priority car parking spaces for those car-pooling.
- SEA could explore demand responsive bus service for staff.

### 4.3. Warsaw Modlin Airport

- A large proportion of surveyed employees live close to the airport, representing an opportunity for fostering soft mobility. 32% of employees commute within 10km to the airport.
- 30% of employees surveyed reported they would be convinced to stop commuting to the airport by car if there was a train station at the airport (nevertheless we understand that commuting is not the driving factor to build a new railway station at the airport).
- A further 14% indicated better frequency of trains / buses, and a further 9% said a bus stop closer to their home would foster modal shift. Public transport services improvement (in particular in terms of bus and train frequency and timetables improvements at modal changes) could foster modal change.



## 4.4. Dubrovnik Airport

- Employees surveyed identified four main issues when asked about what would motivate them to use public transport instead of driving: longer journey times, poor frequency, expensive fares and comfort. 30% of bus users rated the bus frequency as “very bad”. This represents a significant opportunity to improve the bus services to address these concerns and foster modal shift. Employees also identified that if there was a bus service exclusively for employees of the airport it would relieve overcrowding.
- Further bus routes to the airport could be introduced from areas further afield than the immediate area, to provide an option for employees commuting long distances by car.
- Employees suggest a car sharing service, including electric cars, would be popular. 34% of employees surveyed said they would use a car sharing service, and a further 42% said they might use it (we understand that the availability to shared mobility could include car-pool).
- Employees also suggested an electric bicycle sharing scheme could be successful.
- Employees suggested safe cycling routes would increase the viability to commute using a bicycle.

## 4.5. Vienna Airport

- 39% of employees surveyed that chose to use the private car to commute to the airport did so because it was their “only option”. This presents an opportunity for reducing car mode-share by better integrating public transport coverage in a wider territorial area.
- 52% of these employees surveyed said more frequent public transport would enable them to shift from commuting by car. Employees surveyed also identified suggestions for transport improvement to the airport, with strong support for more public transport connections and a more frequent City-Airport Train (CAT)<sup>2</sup>.

## 4.6. Poznan Airport

- The airport is relatively close to the city centre (10km, and this is an opportunity to foster soft mobility including bicycle.
- A large proportion of employees surveyed live close to the airport. 21% live within 5km, a total of 56% live within 10km. This adds to the viability of bicycle and public transport as commuting options.
- 62% of employees surveyed said that if a rail link was built from Poznan city centre to the airport, they would be open to using it to commute (nevertheless we understand commuting would not be the main to build an Air-Rail link).

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<sup>2</sup> Please note that the survey results are dated 2013; therefore, opportunities for Vienna may not be up to date.



## 5. Conclusions

The LAirA airports are characterized by some common traits in terms of potential areas to foster employees' mobility behavioural change:

- Public transport services could be improved, especially in terms of frequency and integration of airport services into the wider urban - regional transport system;
- Cycling infrastructures and facility could foster modal shift for short commutes; this is of particular interest considering that a significant share of employees lives very near the airports;
- There is a general interest in shared mobility solutions;
- Despite working time is in general flexible, car-pool schemes are an opportunity because:
  - > dynamic systems can ease match-riding;
  - > time flexibility needs may be limited and compensated by shorter travel time.
- Demand responsive bus service for staff and staff shuttle services may be an opportunity for future actions.