

# CHAMP

Cycling Heroes Advancing  
sustainable Mobility Practice

## Gap analysis

Kaunas

[www.champ-cycling.eu](http://www.champ-cycling.eu)

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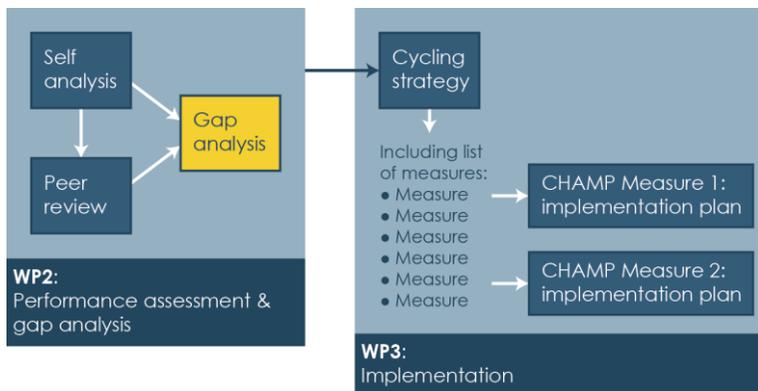
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# Context

The CHAMP project brings together 6 champion cycling cities and 1 climber city which want to further improve their cycling policy and collect new ideas for making cycling more attractive and safer for their citizens. The focus of CHAMP is the exchange of good practice and lessons learned in leading cycling cities. The purpose is both to improve the cycling strategies in the CHAMP cities and to share good practice and lessons learned with other European cities to create safer and more attractive conditions for cycling in Europe.

One of the tools to realise these objectives is a gap analysis of the cycling policy, which is the result of an extensive performance assessment. It combines the findings of the self-analysis questionnaire that all cities completed themselves, and the findings of the peer review where a peer review team visited the city and had in-depth discussions with several stakeholders. In this way the gap analysis will indicate which elements can be added to further improve the cycling policy. The gap analysis is the main input for the development of a strategic plan in WP3. The choice of measures to be implemented within the project will aim at reducing the gaps that are concluded upon (see graphic below).

**Figure 1: Schematic overview of the relationship with other tasks and work packages**



# Structure of this report

This report starts with describing some general background data on the city and its cycling policy, about the demographic conditions, political structure, ... No detailed report on all aspects is given, the aim is to focus on the elements that have an impact on cycling. The mobility related information compiles some first "high level" indicators of the quality of the bike system, such as the bike availability, bicycle usage and safety. The aim is to get a first idea on the outcomes of the cycling policy in the city. Where available, evolutions over time can be provided.

The actual gap analysis is structured by the ten elements already identified as important for the planning and implementation of the cycling policy:

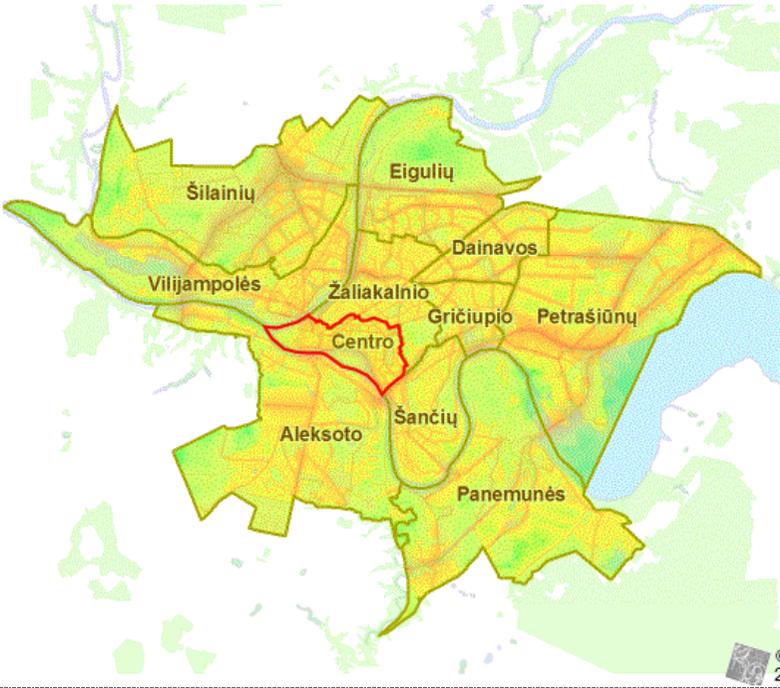
- Planning:
  - User needs
  - Coordination/ organization
  - Cycling plans
  - Monitoring/ evaluation
  - Financial
- Actions:
  - Infrastructure & safety
  - Bicycle availability
  - Education and information
  - Promotion and partnerships
  - Complementary actions.

Each element consists of a number of aspects. For each of them will be summarised what is already done, and indicated what can still be added. It is clear that the final conclusion on the need to add actions of that type for a specific element or aspect and the prioritisation in them is not part of this analysis. This will be done in the strategic plan where all elements are considered together in the global development of the city.

The final chapter summarises the most important gaps in the cycling policy, based on the results of the peer review, understanding that not all gaps can be solved within the CHAMP-project.

# General information

## Context information

Demographic figures	
<ul style="list-style-type: none"><li>Total inhabitants</li></ul>	337 000 inhabitants in 2012
<ul style="list-style-type: none"><li>Districts</li></ul>	<p>There are 11 parishes.</p>  A map of Vilnius, Lithuania, showing its 11 administrative districts. The districts are color-coded and labeled: Šilainių (top left), Eigulių (top center), Dainavos (top right), Viliampolės (middle left), Žaliakalnis (middle center), Gričiupis (middle right), Centro (center, outlined in red), Aleksoto (bottom left), Šančių (bottom center), and Panemunės (bottom right). The map also shows the city's location relative to the Baltic Sea and the Neris river.

<ul style="list-style-type: none"> <li>Demographic features</li> </ul>	<p>Like in the whole Republic, women outnumber men with 55% against 45%. Over the last five years, the birth rate increased from 8.9 births per 1000 inhabitants to 11.4 per 1000 inhabitants. Mortality is trending downwards. The city faces problems with aging of population, declining population and the decreasing number of young people.</p>
<p><b>Situation, topography, weather conditions, urban structure</b></p>	
<ul style="list-style-type: none"> <li>Compactness</li> </ul>	<p>The city covers 157 km<sup>2</sup>. With on average 2150 inh./km<sup>2</sup>, the city is quite compact.</p>
<ul style="list-style-type: none"> <li>One or more city centres (distances between centres/districts)</li> </ul>	<p>The city centre is based on two neighbourhoods of Kaunas: the Old City and the New City. It is located to the east of the confluence of two major Lithuanian rivers, the Nemunas and the Neris. Central Kaunas is defined by two pedestrian streets: the 2-5km long Laisvės Avenue, a central street of the city, and its continuation, Vilnius Street, leading to the oldest part of Kaunas. Different districts' centres are located approximately 5-8 km from the city centre.</p>
<ul style="list-style-type: none"> <li>Location of main economic attraction poles</li> </ul>	<p>The largest concentration of stores with large shopping areas and dealing with home appliances, furniture and cars are located in Dainava, Eiguliai, Šilianiai and along Savanoriai Prospectus.</p>
<ul style="list-style-type: none"> <li>Land topography (hilly, flat, ...)</li> </ul>	<p>Kaunas' altitude varies between 24 and 90 m above sea level. The highest point is in Šilianiai, the lowest in the riverbed at Lampėdžiai. Densely populated areas are located on the hills Žaliakalnis, Aleksotas and Šilianiai, surrounding the city centre located in the valley. There are hilly streets that are not convenient for cyclists. One hill can be reached by a funicular.</p>
<ul style="list-style-type: none"> <li>Climate conditions</li> </ul>	<p>The republic of Lithuania belongs to a medium-latitude climatic zone, with warm summers but cold winters. Spring and autumn are generally cool to mild. The average annual temperature in Kaunas is 6.2°C. On average there are 1700-1750 hours of sunshine per year.</p>
<p><b>Political structure: who is responsible for different aspects of cycling policy (state, region, city, ...)</b></p>	
<ul style="list-style-type: none"> <li>Public Transport</li> </ul>	<p>City council</p>

<ul style="list-style-type: none"> <li>Road network</li> </ul>	The state is responsible for the highways, whereas the city council is responsible for the streets inside the boundaries of the municipality.	
<ul style="list-style-type: none"> <li>Building permits, land-use planning</li> </ul>	City administration	
<ul style="list-style-type: none"> <li>Education</li> </ul>	State and city	
<ul style="list-style-type: none"> <li>Guidelines</li> </ul>	State	
<ul style="list-style-type: none"> <li>European mobility projects</li> </ul>	Development Programmes and Investment Division	
<b>Cycling figures</b>		
<ul style="list-style-type: none"> <li>Modal split</li> </ul>	<b>Survey year(s):</b>	
		All trips within Kaunas
	Walking	5.5%
	Cycling	4%
	Public transport (bus/tram/metro/light rapid transit/water borne transport)	66%
	Multi occupancy car journeys	6.5%
	Single occupancy car journeys	18%
<ul style="list-style-type: none"> <li>Ownership/usage</li> </ul>	Cars	167 000 vehicles
	Bicycles	150 000 bicycles
	Public transport passengers per year	Approximately 1 275 000 single tickets per year, 29 000 7-days tickets, 509 000 one month tickets.

<ul style="list-style-type: none"><li>• Accident analysis</li></ul>	In 2009 and 2010 there were no killed cyclists, in 2011 there was 1 killed cyclist. In 2009 25 cyclists got injured, in 2010 and 2011 14 cyclists got killed per year. Information on the gravity of the injuries is not available.
<ul style="list-style-type: none"><li>• Number of thefts per year &amp; clear-up rates</li></ul>	No data available on city level.

# Elements of cycling policy

In this chapter the structuring elements of a cycling policy are analysed. A distinction is made between elements concerning the planning of the cycling fields on the one hand, and elements concerning actions that are taken to implement the cycling policy.

## Planning

### User Needs

Here we describe how bicycle user needs are ascertained and managed, to guarantee a customer-oriented approach, as a basis for the requirements of the “bike system”. Attention is drawn towards how the authority involves the end-users and commercial parties to participate in the political decision making process, and which other methods are used for examining the existing user needs.

Structured interactions with users	
<ul style="list-style-type: none"><li>• General interaction with cyclists</li></ul>	NGOs represent the individual cyclists and give regular feedback in the Working Group for cycling policy and implementation.
<ul style="list-style-type: none"><li>• Inquiries/ surveys</li></ul>	Surveys are carried out depending on the requirements, approximately every three years. For example, while preparing the Kaunas city Master Plan for 2003-2023, citizens are asked to fill in an electronic questionnaire about the mobility system of the city.
<ul style="list-style-type: none"><li>• Consultation of citizens before decision making</li></ul>	The city talks to users before making decisions, in the meetings of the Working group for cycling policy and implementation, publishing articles in local press, asking questions on the municipality site and collecting the answers. A public hearing was organised in 2008 before approving the Specific Cycling Plan. Also for the program for the construction, maintenance and repair of cycling lanes, the draft is always discussed with representatives of NGOs, and their feedback influences the final version of the programme. Another example is the decision to keep the cycle lane in the pedestrian street, after having asked citizens' opinion about this.

<ul style="list-style-type: none"> <li>• Meetings/workshops</li> </ul>	Workshops are organised during the implementation for the projects where Kaunas municipality is taking part.
<b>Structured interactions with commercial parties</b>	
<ul style="list-style-type: none"> <li>• Workshops</li> </ul>	Workshops are organised during the implementation for the projects, where Kaunas municipality is taking part. For example in the SMOOTH-project, the municipality invited commercial parties located in the city centre to contribute to cycling development by installing bicycle parking racks and to discuss the top priority spots to install those racks.
<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	Meetings are organised with commercial parties, usually during meetings with the Kaunas Chamber of Commerce. Those meetings usually address mobility issues in general.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Consultation before decision making</li> </ul>	Besides the consultation of citizens in general, there is no specific consultation of commercial parties.
<ul style="list-style-type: none"> <li>• Surveys</li> </ul>	There are no regular meetings on cycling with commercial parties
<b>Collection of complaints or questions</b>	
<ul style="list-style-type: none"> <li>• General contact point</li> </ul>	Kaunas city municipality administration
<ul style="list-style-type: none"> <li>• Specific contact point for cycling</li> </ul>	Complaints are collected by the Lithuanian Cyclists' Community and Cyclists' club.
<ul style="list-style-type: none"> <li>• Feedback given to complaints</li> </ul>	The Working group for cycling policy and implementation gives feedback to the complaints that are collected by the Lithuanian Cyclists' Community.
<ul style="list-style-type: none"> <li>• Database of complaints</li> </ul>	All complaints (regarding all issues) are registered in the internal municipality database. It is possible to filter complaints regarding cycling policy from this database. Kaunas implemented the project e-democracy development in Kaunas, where instruments were created to enable citizens to give their opinion about documents, answer surveys and make complaints while fixing the geographical spot on the map.
<b>Research/ data analysis</b>	

<ul style="list-style-type: none"> <li>• Modal split</li> </ul>	Data are available on all trips within the city municipality.
<ul style="list-style-type: none"> <li>• Ownership/usage</li> </ul>	The total number of cars and bicycles in the city is available.
<ul style="list-style-type: none"> <li>• Accident analysis</li> </ul>	General accident data are available for deaths and injuries and are analysed in transport planning documents. Also accident data for children were analysed by the Safe Traffic School.
<ul style="list-style-type: none"> <li>• Network quality: identifying gaps</li> </ul>	Kaunas city Specific Cycling Plan includes a gap analysis of the cycling network.
<ul style="list-style-type: none"> <li>• Analysis of mobility behaviour of target groups (schools, companies, ...)</li> </ul>	<p>Within the framework of the SMOOTH project (Safety and Mobility Optimisation for Sustainable Transport and Health) all 16 participating schools completed the 'School Travel Plan' (STP) that includes a journey audit of routes to and from school. Based on the results of the STP, road safety measures were taken near several schools (pedestrian crossings, traffic lights systems, better road and pedestrian signage, traffic calming measures etc.).</p> <p>For the COMMERCE project (Creating Optimal Mobility Measures to Enable Reduced Commuter Emissions), the mobility situation in north-eastern part of Kaunas city (500 hectares, with large companies, focusing on industry) was analysed for the travel to work plan. A written survey of seven companies was carried out in 2008 and 2010 to determine from which areas people mostly travel to work, which means of transport are used, how long is the journey, and what measures would encourage the use of public transport. Each morning arrive about 30 thousand employees, half of them are coming by bus, trolleybus and minibus. Other comes by car, bicycle, and foot. In written surveys in 2008 and 2010 seven companies (390 workers and managers) took part.</p>
<ul style="list-style-type: none"> <li>• Analysis of user feedback</li> </ul>	Feedback by the Lithuanian Cyclists Community is analysed in the working group on cycling policy and implementation.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Number of thefts per year &amp; clear-up rates</li> </ul>	These data are not available on city level, only in the different parishes.

<ul style="list-style-type: none"> <li>• Cyclist profile</li> </ul>	<p>No data is available on the cyclist profile. This might be interesting to give an idea on who cycles, to determine new target groups.</p>
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## Coordination/ organisation

Here we examine the way all different stakeholders which have a responsibility in the definition and implementation of a strong cycling policy work and interact. The interaction with end-users (citizens and commercial parties) was already discussed when examining the user needs; additionally, the following stakeholders are important:

- Politicians/ leading officers
  - City level
  - Other policy levels (e.g. regional or national)
- City administration
  - Mobility department
  - Other departments
- Service providers.

<b>Organisational structure of mobility department</b>	
<ul style="list-style-type: none"> <li>• Clear definition of tasks and responsibilities concerning traffic &amp; mobility</li> </ul>	<p>The Environmental Protection Department is responsible for the development of bicycle paths and the cycling policy. The Economy Department is responsible for the construction of roads, including cycling paths. The Transport Management Department is responsible for general transport and safe traffic organisation, including cycling paths' marking.</p>
<ul style="list-style-type: none"> <li>• Specific responsible for cycling</li> </ul>	<p>There is one person (chief specialist) responsible for cycling in the Environmental Protection Department.</p>

<ul style="list-style-type: none"> <li>• Continuous training</li> </ul>	Staff members from the Environmental protection division and Transport management division take part in training during participation in international projects.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Clear definition of tasks and responsibilities concerning traffic &amp; mobility</li> </ul>	Because of the dispersion of responsibilities across the different divisions, close interaction is needed. Unifying all divisions in one mobility department would facilitate decisions on cycling.
<ul style="list-style-type: none"> <li>• Regular interaction between transport division and cycling officer regarding mobility decisions affecting cycling</li> </ul>	The organisational structure still reflects the historically grown role that cycling used to have in the last decennia in the city: the transport department is strongly oriented towards public transport and car traffic, without a traffic engineer working on cycling. Whenever new roads are planned, the possibility of cycling infrastructure is analysed, together with the Urban planning Department, but it is not a priority.
<b>Political driver on city level</b>	
<ul style="list-style-type: none"> <li>• Important role for cycling in the general city policy</li> </ul>	The city council approved in 2010 the Special Cycling Plan and the City Strategic Plan for 2005-2015, showing its support for cycling.
<ul style="list-style-type: none"> <li>• Regular interaction with cycling/mobility department</li> </ul>	Politicians participate sometimes in the Working group for cycling policy and implementation and in the Kaunas city Traffic Safety Commission. Staff members from the Environmental protection division and the Transport management decision make proposals to politicians concerning mobility decisions affecting cycling.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Important role for cycling in the general city policy</li> </ul>	Politicians recognise the role of cycling in the city, but decisions affecting the car use are still difficult.
<b>Other policy levels (national, regional, European, ...)</b>	

<ul style="list-style-type: none"> <li>Active interaction</li> </ul>	<p>The Ministry of Transport established a Cycling working group to prepare recommendations to improve cyclists' conditions in the municipalities, making proposals for the decision makers how to use ERDF support for cycling infrastructure.</p>
<ul style="list-style-type: none"> <li>Alignment with cycling policies of neighbouring municipalities</li> </ul>	<p>There is strong cooperation with surrounding Kaunas district municipalities; bike lanes going out of the city, connecting the city with the surrounding municipalities are planned and realised. The country's first Cycling Paths Scheme by the Kaunas District Municipality was aligned with the Kaunas Specific Cycling Plan, providing certain junctions of urban-rural cycling routes.</p>
<ul style="list-style-type: none"> <li>Alignment with guidelines on cycling topics</li> </ul>	<p>There are no official guidelines on cycling in Lithuania yet, however the Transport ministry has distributed recommendations on cycling infrastructure planning and implementation prepared during the PRESTO project.</p>
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Alignment with guidelines on cycling topics</li> </ul>	<p>No new cycling lanes were built nor planned according to the recommendations mentioned above.</p>
<b>Other policy fields</b>	
<ul style="list-style-type: none"> <li>Regular interaction/communication</li> </ul>	<p>Staff members from the Environmental protection division and the Transport management decision make proposals to other divisions of the municipality concerning mobility decisions affecting cycling. Members of the committees insist to have bike lanes in new or reconstructed streets in the city.</p> <p>There is interaction with politicians in other policy fields like tourism, city development, investment, by proposing decisions and presenting drafts of the decisions in the committees.</p>
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Recognition of importance of cycling/ bearing in mind cycling impact in decision making</li> </ul>	<p>Although cycling is recognised in all main documents that are approved by the city council, other policy fields do not automatically take into account the importance of cycling in their decisions. This happens only after proposals or suggestions from the Environmental protection division.</p>
<b>Service providers</b>	

<ul style="list-style-type: none"> <li>Regular interaction/communication</li> </ul>	Service providers are selected according to the law of public procurement; therefore communication with selected company usually takes place during the period of the agreement.
<b>Coordination of stakeholders</b>	
<ul style="list-style-type: none"> <li>Working groups/committees with different stakeholders</li> </ul>	The Working group for cycling policy and implementation was approved by the order of Director of Administration of Kaunas. There are representatives from the city Municipal Administration, NGOs, Safe Traffic School.

## Cycling Plans

Here we check how the cycling policy is put on paper and to which extent it is integrated into the broader framework of policy plans and documents.

<b>Anchoring cycling in general policy documents</b>	
<ul style="list-style-type: none"> <li>Specific bicycle plan</li> </ul>	<p>The Special Cycle plan was approved by the city council, and includes a Cycle paths development scheme with a priority plan for the development of a desired cycling network with both recreational and residential cycling paths. It also includes targets for the length of the cycling network.</p> <p>The city council every year approves the program for the construction, maintenance and repair of cycling lanes for the next 2 years.</p>
<ul style="list-style-type: none"> <li>Urban plan</li> </ul>	Kaunas city Master Plan 2003-2013 was approved by City Council in 2003. An update for 2003-2023 is being prepared. It includes the development of transport and infrastructure including cycling, although compromising between conflicting needs of other policy fields. Cycling is also anchored in the Kaunas City Strategic Plan 2005-2015.

<ul style="list-style-type: none"> <li>Other mobility related plans: car parking, road safety, PT, ...</li> </ul>	<p>Feasibility study "On protected sites for cars in Kaunas Multi apartment areas" is under preparation (according analyses there are 524 cars for 1000 inhabitants in Kaunas and need for 42000 car parking places); Feasibility study "Car parking management in the city centre and densely populated areas" is prepared, special plan "For car parking sites positioning in the territory of the city" is under preparation; Long time PT development strategy was prepared in the city.</p> <p>Also mobility plans for travelling to work or to school have been prepared for certain schools and business areas, including measures to promote cycling.</p>
<ul style="list-style-type: none"> <li>Guidelines on the design of cycling lanes</li> </ul>	<p>There is a booklet on Kaunas city cycling lanes.</p>
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Specific bicycle plan</li> </ul>	<p>The Special Cycle plan focuses on the development of the cycling network, and does not foresee a long term cycling strategy including complementary actions. Furthermore, it is crucial to link the plan to a financial plan, to ensure its realisation.</p>
<ul style="list-style-type: none"> <li>Urban mobility plan</li> </ul>	<p>Not available</p>
<ul style="list-style-type: none"> <li>Mobility plan on other policy fields</li> </ul>	<p>Not available</p>
<ul style="list-style-type: none"> <li>Mobility plan on other policy levels</li> </ul>	<p>Not available</p>
<ul style="list-style-type: none"> <li>Mobility plans of neighbouring municipalities</li> </ul>	<p>Not available</p>
<ul style="list-style-type: none"> <li>Citizen engagement plan</li> </ul>	<p>Not available</p>

## Financing

This element deals with the financial aspects of the cycling policy, examining which money is at the disposal to implement the cycling policy, and how it is spent. Besides the city budget that is dedicated to cycling, also attention is paid to investments of other parties that add to the implementation of the cycling policy.

<b>Sources for the budget for cycling policy</b>	
<ul style="list-style-type: none"> <li>• Specific cycling budget</li> </ul>	300 000 Lts (almost € 90 000) are foreseen in 2012 for the extension of the cycling network to residential areas.
<ul style="list-style-type: none"> <li>• Funds from other policy levels</li> </ul>	Several actions for the promotion of sustainable mobility, or cycling specifically, are funded by international programmes. The city of Kaunas applied for additional funding from the Ministry of Transport and Communications.
<ul style="list-style-type: none"> <li>• Local taxes</li> </ul>	The main source of income for the Environmental protection division is a pollution tax for companies.
<ul style="list-style-type: none"> <li>• Other policy fields</li> </ul>	The cycling budget is funded by the municipality fund of Special Environmental Protection Programme.
<ul style="list-style-type: none"> <li>• Commercial parties</li> </ul>	Retailers were asked to sponsor the Parade of Kaunas cyclists and the Kaunas bicycle marathon.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Specific cycling budget</li> </ul>	The budget has fallen back significantly during the last two years, and therefore does not allow improving the bicycle infrastructure faster.
<ul style="list-style-type: none"> <li>• Parking fees</li> </ul>	
<ul style="list-style-type: none"> <li>• Service providers</li> </ul>	
<b>Spending of the budget for cycling</b>	
<ul style="list-style-type: none"> <li>• Based on investment plan</li> </ul>	The budget for cycling measures is based on the programme for the development, maintenance and repair for cycle paths that is yearly renewed.
<ul style="list-style-type: none"> <li>• Supporting innovative cycling projects</li> </ul>	By participating in international projects (SMOOTH, BUSTRIP, COMMERCE), Kaunas implements also more innovative projects.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Balancing between different types of actions</li> </ul>	Most of the funding on city level goes to cycling infrastructure, the budget for complementary actions is limited.

## Evaluation

This element examines whether the cycling policy is being evaluated, by monitoring indicator that are related to the objectives.

<b>Evaluation of the cycling policy</b>	
<ul style="list-style-type: none"> <li>• Specific cycling indicators in relation to the policy objectives</li> </ul>	Assessment of several cycling indicators is carried out through the annual reports of the Environmental Protection Department.
<ul style="list-style-type: none"> <li>• Database that collects indicators</li> </ul>	The Lithuanian Department of Statistics collects cycling indicators; also the municipality has a cycling indicator database.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Monitoring by permanent counting points, surveys, ...</li> </ul>	No
<ul style="list-style-type: none"> <li>• Long-term analysis</li> </ul>	Analysis of indicators in the long term is missing.

## Actions

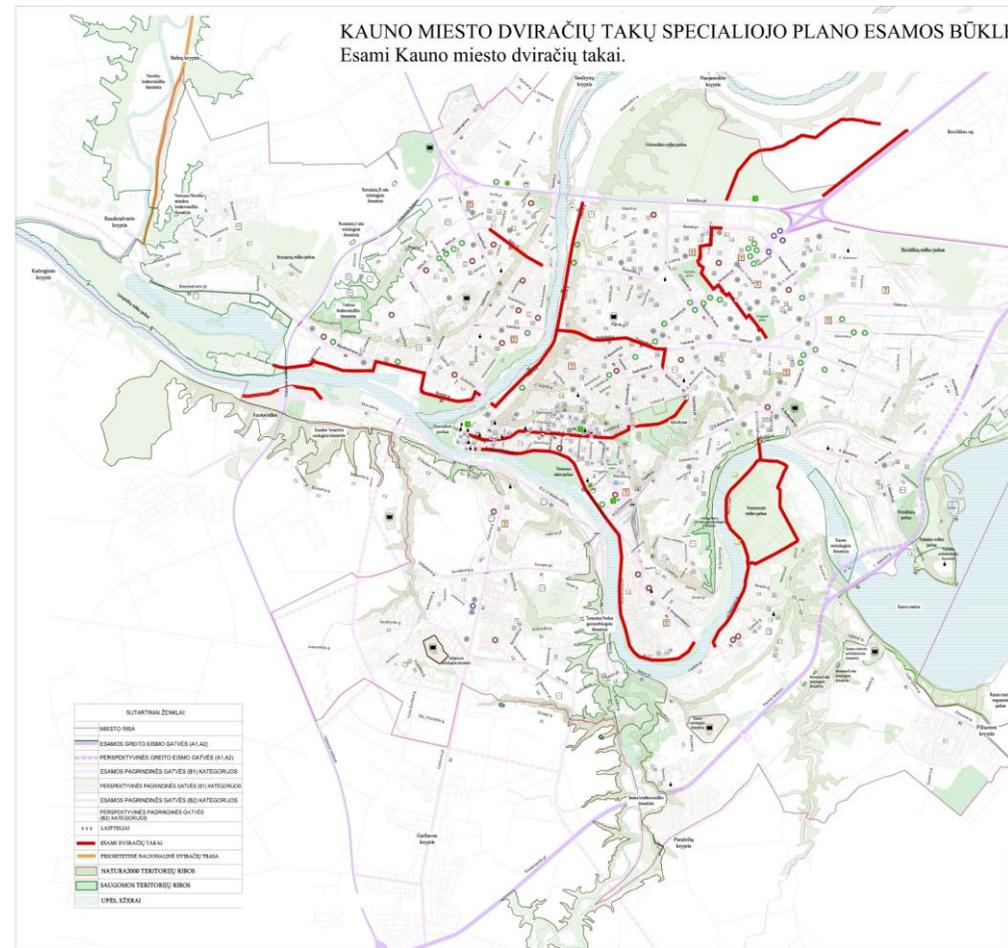
### Infrastructure & Safety

Here all measures that are related to the cycling infrastructure are examined. Improving safety and maintenance of the infrastructure are crucial in relation to the infrastructure. Therefore these aspects are mentioned separately.

<b>Cycling network</b>	
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Kaunas started with the development of cycle paths, according to the cycle development scheme. It distinguishes between recreational and functional routes.

- Coverage of the network



<ul style="list-style-type: none"> <li>• Comfort</li> </ul>	<p>The existing cycle paths are mostly off-road cycling lanes, often located in pleasant environments, like parks, the pedestrian area and recreational areas, where there is no or limited car traffic.</p>
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Coverage of the network</li> </ul>	<p>The majority of main roads are not equipped with cycling provisions. Most of the cycle lanes are built in parks and recreational areas, meaning that they are often used for recreational cycling and less suitable for daily use.</p>
<ul style="list-style-type: none"> <li>• Main high quality cycling corridors connecting important locations</li> </ul>	<p>There are still a lot of important locations that don't have access to the cycling network. The network should be extended linking all important residential and economic centres for daily use. However, road design focuses on motorised traffic and car parking, even though it would be possible to paint on-street cycle lanes in order to give them their own space and visibility.</p> <p>As it takes time to realise a complete cycling network, a first step could be to increase the visibility of cyclists by realising a limited number of cycle routes between important locations. This would increase the number of cyclists in certain neighbourhoods, before extending the network to the rest of the city. The routes to the university can play an example role; students can be easily targeted as they do not have their fixed mobility patterns yet.</p>
<ul style="list-style-type: none"> <li>• On-street signage</li> </ul>	No
<ul style="list-style-type: none"> <li>• Comfort</li> </ul>	Cyclists have to face a lot of obstacles on the cycling paths, such as holes in the surface, steep curbs, ...
<ul style="list-style-type: none"> <li>• Quality consistent with the categorization of the roads for cars and cycling</li> </ul>	The Cycle path development scheme distinguishes between recreational and functional cycle paths. However, most of this is not realised yet. The extension of the network should distinguish between shared space in areas with low motorised traffic speeds and intensities, off-road segregated cycling lanes as alternatives for busy roads, and variations in between.
<ul style="list-style-type: none"> <li>• Right-of-way for cyclists</li> </ul>	Cyclists don't have right-of-way; moreover, in one-way streets, cyclists are not allowed to cycle in the other direction.
<b>Safety</b>	
<b>GAPS</b>	

<ul style="list-style-type: none"> <li>• Separation from car traffic where necessary</li> </ul>	Not on all busy roads there are cycling lanes available; cyclists have to cycle between busy car traffic or on the sidewalk with the pedestrians.
<ul style="list-style-type: none"> <li>• Cycling provisions at intersections</li> </ul>	There are no facilities for cyclists at junctions; cyclists have to cross together with pedestrians.
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Traffic lights: e.g. all green phase, priority</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Infrastructural: e.g. Storage lanes</li> </ul> </li> </ul>	
<b>Availability of network</b>	
<ul style="list-style-type: none"> <li>• Maintenance works prioritised by main attraction points, road characteristics and complaints</li> </ul>	Cycling paths suffer from the cold climate, so large maintenance works are necessary after winter, taking a big bite out of the cycling budget. Priorities for maintenance and repair of cycle paths are determined in the Cycle path maintenance and repair programme for the year 2012-2013.
<ul style="list-style-type: none"> <li>• Specific equipment for maintenance and cleaning (road sweepers, ...)</li> </ul>	Yes
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Action plan for heavy snowfall or ice</li> </ul>	No, during winter there are no real efforts to keep cycling lanes clean.

## Availability of the bicycle

This element focuses on the availability of the bicycle, both residential as at the destination point. Important aspects are the possibilities to park the bike at home, in the activity place, to be able to rent bicycles, compatibility with PT and theft prevention.

<b>Residential bicycle parking</b>	
<ul style="list-style-type: none"> <li>On-street possibilities</li> </ul>	There are 118 bicycle stands in the central part of the city and near schools.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>In-house possibilities</li> </ul>	Residential bicycle parking is often only possible when there is a yard inside the territory.
<b>Cycling facilities in working and schools areas</b>	
<ul style="list-style-type: none"> <li>Refreshing facilities (shower, ...)</li> </ul>	Some companies have showering facilities.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Parking places with shelters</li> </ul>	There are no parking places with shelters, as bicycles are mostly used during summer. Some student areas have bicycle parking facilities, but they are not always well accessible.
<b>Cycling parking at other activity poles (shopping area, leisure, services, ...)</b>	
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Parking places with shelters</li> </ul>	Parking places in shopping areas usually don't have shelters.
<b>Compatibility with public transport</b>	
<ul style="list-style-type: none"> <li>Possibility to take bikes on PT</li> </ul>	Facilities to take bicycles on PT are installed in 5 buses, thanks to the Long term strategy of Kaunas PT.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>Parking facilities in railway stations</li> </ul>	There are bicycle parking facilities at the main railway station, but they are not easily accessible (you have to cross the street by an underground tunnel with stairs).

<ul style="list-style-type: none"> <li>• Parking facilities at regular bus stops</li> </ul>	No parking facilities at regular PT stops
<b>Putting bicycles at the disposal of people that do not own a bike</b>	
<ul style="list-style-type: none"> <li>• Bicycle rental system</li> </ul>	There bicycle rental system, operating in summer and mainly for tourists. Also private initiatives aim at putting bicycles at the disposal of specific target groups such as tourists.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Bicycle rental system</li> </ul>	The bicycle rental system aims mostly at tourists and other forms of recreational cycling; there is no system aiming at citizens who want to start cycling.
<ul style="list-style-type: none"> <li>• Recycling lost bicycles and putting them at the disposal</li> </ul>	No
<ul style="list-style-type: none"> <li>• Bicycle repair service</li> </ul>	Only private servicing companies.
<b>Bicycle theft prevention</b>	
<ul style="list-style-type: none"> <li>• Bicycle marking</li> </ul>	The police offer free bicycle security marking.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Secured bicycle parking</li> </ul>	No, bicycle theft is still a problem.

## Promotion & Information

Promotion & Information examines the way in which cycling is promoted in the city creating awareness for the benefits of cycling; one way to do this is to inform the citizens about the possibilities to cycle in the city.

<b>General promotion and information</b>	
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<ul style="list-style-type: none"> <li>• Variety of promotion activities</li> </ul>	
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Events</li> </ul> </li> </ul>	The city organised several cycling events, often in cooperation with NGOs: Bicycle Marathon, Parade of Kaunas Cyclists, European Mobility Week, ...
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Contests</li> </ul> </li> </ul>	The Safe Child School organises figure cycling contests for children in different Kaunas city communities.
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Media campaigns</li> </ul> </li> </ul>	Events are mostly reported in local media.
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Campaigns focusing on specific target groups</li> </ul> </li> </ul>	Kaunas Public Health Bureau organised several promotion campaigns: "Bicycle can be your friend", a promotion and safety campaign for children.
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Website</li> </ul> </li> </ul>	Several websites promote the use of bicycles, such as the Lithuanian Cyclists' Community, Velomanai (a cycling amateur club), Dviratai (event organiser for cyclists), Safe Child School, Kaunas bicycle marathon, ...
<ul style="list-style-type: none"> <li>• Example role for city administration</li> </ul>	The city administration gets involved in the European mobility Week campaign "A day without my car".
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Promotion of the future role of the bike</li> </ul>	Cycling should be promoted more as a daily means of transport and its environmental and health benefits.
<b>Targeting specific user groups</b>	
<ul style="list-style-type: none"> <li>• Schools</li> </ul>	The Safe Traffic School publishes a newsletter to inform children on organised events, contests, and information.
<ul style="list-style-type: none"> <li>• Parents</li> </ul>	Also parents are targeted, by a leaflet informing them to take care of the safety of their children when they are cycling, how to promote physical activity among children.
<ul style="list-style-type: none"> <li>• Universities</li> </ul>	Environmental campaign is organised by the university.
<ul style="list-style-type: none"> <li>• PT-users</li> </ul>	Information on bicycle events is shown on information screens inside buses.
<ul style="list-style-type: none"> <li>• Employees</li> </ul>	The Travel to work plan has been developed to promote sustainable mobility to employees working in large companies in the north-eastern part of the city.

<b>GAPS</b>	Campaigns are mainly targeting children and people who already cycle, instead of convincing people who do not cycle yet.
<ul style="list-style-type: none"> <li>• Other road users</li> </ul>	Also other road users could be targeted more explicitly, concerning their behaviour in traffic.
<ul style="list-style-type: none"> <li>• Elderly</li> </ul>	
<b>Highlighting specific topics</b>	
<ul style="list-style-type: none"> <li>• Cycling routes</li> </ul>	A cycling map is available on the website.
<ul style="list-style-type: none"> <li>• Health</li> </ul>	The Public Health Bureau published leaflets and posters targeting children to promote healthy lifestyles, where cycling is a part of.
<ul style="list-style-type: none"> <li>• Safety</li> </ul>	Several safety campaigns are organised, mainly targeting children and their parents.
<ul style="list-style-type: none"> <li>• Equipment (helmets, lights, ...)</li> </ul>	Road Safety Law in Lithuania requires cyclists under 18 years old to wear helmets.
<b>GAPS</b>	Up to now, safety campaigns, information provision and cycling training are focusing on how to cycle safely and how to avoid accidents instead of the positive aspects of cycling.
<ul style="list-style-type: none"> <li>• Interactive route guidance</li> </ul>	No
<ul style="list-style-type: none"> <li>• Bicycle theft</li> </ul>	Only general information from the policy on how to protect property during holidays.
<ul style="list-style-type: none"> <li>• Smart info on parking availability</li> </ul>	No

## Education & Partnerships

This element focuses on education activities towards specific user groups and on specific topics. We also discuss possible partnership the city sets up with organisations to work together to increase cycling in general or in relation to the activity of these organisations.

<b>Education to different user groups</b>	
<ul style="list-style-type: none"> <li>schools</li> </ul>	Courses for schoolchildren (5-18 years old) and teachers are organised by the Safe Child School. This charity organisation organises cycle trainings, cycling exams, information campaigns, leaflets, posters, games, newsletters, workshops in other schools, accident analysis, ...
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>other road users</li> </ul>	
<ul style="list-style-type: none"> <li>elderly</li> </ul>	
<ul style="list-style-type: none"> <li>adults</li> </ul>	
<ul style="list-style-type: none"> <li>employers</li> </ul>	
<ul style="list-style-type: none"> <li>Retailers</li> </ul>	
<b>Education on specific topics</b>	
<ul style="list-style-type: none"> <li>Practical skills</li> </ul>	Courses on practical skills are organised by the Safe Traffic School, as preparation for an exam for children aged 12-14 to be allowed to cycle on street independently.
<ul style="list-style-type: none"> <li>Traffic legislation</li> </ul>	Courses by the Safe Traffic School include this topic as well.
<ul style="list-style-type: none"> <li>Equipment (helmets, lights, ...)</li> </ul>	Courses by the Safe Traffic School include this topic as well.
<ul style="list-style-type: none"> <li>Safety</li> </ul>	Courses by the Safe Traffic School include this topic as well.
<b>Partnerships</b>	
<ul style="list-style-type: none"> <li>Schools</li> </ul>	The Safe Cycling School is one of the most important partners for education on cycling, they work closely with other schools in Kaunas.
<ul style="list-style-type: none"> <li>User groups</li> </ul>	User groups like the Lithuanian Cyclists Community help organising bicycle events.
<b>GAPS</b>	

<ul style="list-style-type: none"> <li>• Employers</li> </ul>	
<ul style="list-style-type: none"> <li>• elderly</li> </ul>	
<ul style="list-style-type: none"> <li>• PT-users</li> </ul>	
<ul style="list-style-type: none"> <li>• retailers</li> </ul>	
<ul style="list-style-type: none"> <li>• other road users</li> </ul>	

### Complementary actions

This module deals with activities or decisions beyond the core responsibilities of the cycling policy that indirectly affect cycle use, avoiding counter-productive effects.

<b>Measures to curb car use</b>	
<ul style="list-style-type: none"> <li>• Speed limits</li> </ul>	In the main streets in the city centre there is a 50 km/h speed limit for cars.
<ul style="list-style-type: none"> <li>• Strict parking regulations</li> </ul>	In the city centre parking process are higher than at the outskirts of the city.
<ul style="list-style-type: none"> <li>• Car circulation plan limiting traffic in specific zones and making cycling the shortest trip (e.g. detours for cars)</li> </ul>	The main street of the city is a pedestrian area, with painted bicycle lanes. Only special vehicles have a permit to enter the street.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Strict parking regulations</li> </ul>	In the city centre, a lot of public space is still dedicated to car parking, limiting the available space for cycle lanes.
<ul style="list-style-type: none"> <li>• Speed limits</li> </ul>	Speed of car traffic is still high at a lot of places, discouraging and scaring cyclists.

<ul style="list-style-type: none"> <li>• Road pricing</li> </ul>	
<b>Land-use planning to encourage cycling</b>	
<ul style="list-style-type: none"> <li>• Compact city structures to make distances short</li> </ul>	Kaunas is a compact city; most trips can be done by bike in 30-40 minutes.
<ul style="list-style-type: none"> <li>• Promotion of sustainable travel to work or school</li> </ul>	Travel to work plans were prepared for some business areas and schools, promoting all sustainable transport modes.
<b>GAPS</b>	
<ul style="list-style-type: none"> <li>• Regulations on bike facilities in building permits</li> </ul>	There are no regulations on bicycle facilities in buildings.
<ul style="list-style-type: none"> <li>• Compulsory mobility aptitude examination for all new developments</li> </ul>	

# Conclusions & recommendations

The planning of the cycling policy lacks a sustainable transport plan that integrates all modes of transport, with a prominent role for cycling. This plan should include besides infrastructural measures also complementary actions to curb car use and the promotion of sustainable transport. It is crucial to link the plan to a financial plan, to ensure its realisation.

On the field, the focus is currently on the realisation of recreational cycle routes, whereas the majority of main roads are not equipped with cycling provisions, forcing the cyclists to choose between cycling on the sidewalk or next to motorised traffic. Road design focuses on motorised traffic and car parking, even though it would be possible to paint on-street cycle lanes in order to give them their own space and visibility.

This network should be extended linking all important residential and economic centres for daily use. As mentioned before, this should be done according to a balanced plan, distinguishing between shared space in areas with low motorised traffic speeds and intensities, off-road segregated cycling lanes as alternatives for busy roads, and variations in between. This should be complemented by a more cycle-friendly environment, with reduced car speeds, car-free areas and one-way streets that are accessible for cyclists in both directions. As it takes time to realise a complete cycling network, a first step could be to increase the visibility of cyclists by realising a limited number of cycle routes between important locations. This would increase the number of cyclists in certain neighbourhoods, before extending the network to the rest of the city. The routes to the university can play an example role; students can be easily targeted as they do not have their fixed mobility patterns yet.

Furthermore, the realisation of cycling infrastructure should be accompanied by the promotion of cycling as a means of transport and its environmental and health benefits. Up to now, safety campaigns, information provision and cycling training are focusing on how to cycle safely and how to avoid accidents. Also car drivers should be targeted more, as they are not used to sharing space with cyclists; these campaigns should be accompanied by actions to curb car use, like mentioned above.

Furthermore, it is important to use different messages and channels for promotional campaigns. The city should also keep on making cycling visible in the city, like the cycling events that are already organized.