



MOBYCON ANNUAL REPORT 2022





A CHANGE IN MOBILITY DIRECTION

Mobility – both access and ability - is integral in enabling people to move around their communities and cities and the different places and activities that are part of their daily lives. It is a crucial factor for personal and professional development, economic participation, and social integration. Mobility allows people to participate in social activities including employment, education, health care, and leisure. I am starting by providing this thorough definition because I believe it emphasizes the importance of the field of work that Mobycon operates in.

When we think about mobility, long-distance travel is the first thing that comes to mind – extensive commutes mainly with one destination in mind. But nothing could be further from the truth.

For most people, many of our daily trips are less than 10 kms in distance. In fact, a number of global studies have found that the shorter distance trips account for about 70% of all trips taken. The choice of which mode to use to make those trips is often very limited, consisting mainly of the private car, public transport, or walking. Currently, private cars and public transport often have an enormous claim on public space; a claim that impacts the life of a village or city. Activities on and around the street get squeezed, air quality is poor, and the traffic noise is so disruptive that encounters on the street become increasingly difficult. Therefore, it is not surprising that in many places around the world, both political leaders and residents alike are looking for an alternative and a different strategy for their communities: A strategy that enables greater cycling, makes walking more attractive, and returns human scale life and activities to our streets.

I am proud that the our Mobycon team is supporting this search for a different strategy, developing concrete measures and building best practice knowledge in many places around the world. Our mission, “To make the world less dependent on the car,” can only succeed if people dare to choose an alternative.

Within this Annual Report is a snapshot of our projects from 2022: mobility strategies, research, design solutions, communications, process development, and capacity building. I hope it provides you inspiration of what can be achieved, and of course we hope to continue our support with your plans and ambitions for 2023!

Johan Diepens
CEO Mobycon

- 
-  CANADA
 -  USA
 -  DACH REGION
 -  THE NETHERLANDS
 -  INTERNATIONAL PROJECTS
 -  INTERNATIONAL PARTNERSHIPS



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CANADA



CANMORE PROTECTED INTERSECTION COMPLETION

Canmore is a small mountain town with ambitious plans to improve walking and cycling for its residents.



TEEPEE TOWN LOW TRAFFIC NEIGHBOURHOOD NETWORK STUDY

The Town of Canmore wants to retrofit this neighbourhood to create a safe and attractive street network that responds to the recently approved Area Redevelopment Plan.



COMMERCIAL STREET MASTER PLAN IN NANAIMO, CANADA

Commercial Street and the surrounding area in downtown Nanaimo, BC, are the business, shopping, transportation, tourism, and event hubs of the city.

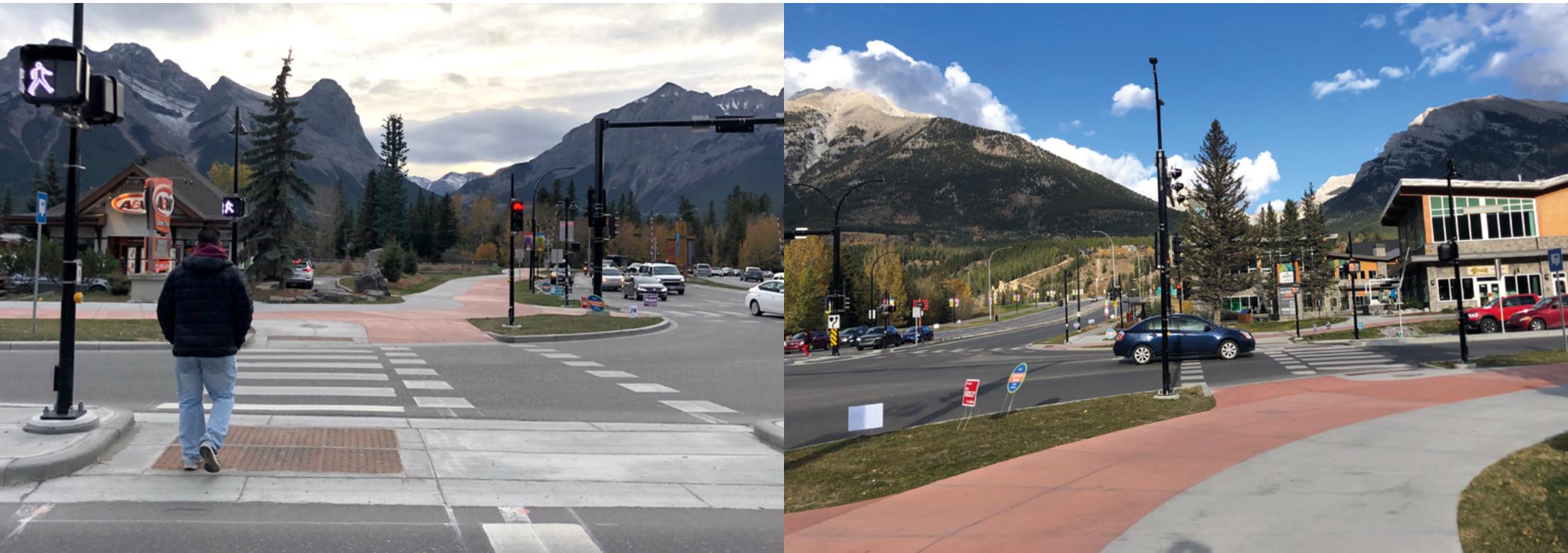


ICIP CYCLING NETWORK EXPANSION

The City of Guelph received an Investing in Canada Infrastructure Program (ICIP) grant to design and build 13 km of protected cycling infrastructure on three major corridors.



CANMORE PROTECTED INTERSECTION COMPLETION



Canmore is a small mountain town with ambitious plans to improve walking and cycling for its residents. In 2018, Mobycon created a redesign of Railway Avenue, a crucial link in the Canmore, connecting several major access points to the town centre. A major element of the corridor was the intersection of Railway Ave and Bow Valley Trail. Mobycon designed a Dutch-style protected intersection with separated facilities for walking and

cycling. The final design was approved by the town council and phase one of construction began in the summer of 2021. This year, construction of the entire intersection was completed. Mobycon worked closely with the Town to optimize signal phasing in the intersection. Significant safety benefits have already been seen in the intersection since it's completion.

TEEPEE TOWN LOW TRAFFIC NEIGHBOURHOOD NETWORK STUDY

Formerly a low-density community, Teepee Town, a neighbourhood in Canmore, Alberta, aims to increase the density of the town as it expands. The Town of Canmore wants to retrofit this neighbourhood to create a safe and attractive street network that responds to the recently approved Area Redevelopment Plan. Mobycon, with subconsultant Dick van Veen, was retained by the Town to assess the current transportation network of the neighbourhood and provide conceptual designs for achieving a “low-traffic neighbourhood.” To achieve this, the work focused on active transportation and residential place values while accommodating a reduced level of car travel and parking.

Mobycon provided the Town with two similar, but fundamentally different approaches; a low-traffic neighbourhood concept and a ‘woonerf’ concept. Mobycon explored each concept, providing network design concepts and potential street cross-sections for future community consultation. After reviewing background documents to gain an understanding of the local context, a vision statement and storyboard were developed for



the two visionary perspectives. This information was used to develop a network plan with recommendations for roadway network changes. Final conceptual designs were then developed for the two approaches in the Canmore context by incorporating community feedback.

COMMERCIAL STREET MASTER PLAN IN NANAIMO, CANADA

Commercial Street and the surrounding area in downtown Nanaimo, BC, are the business, shopping, transportation, tourism, and event hubs of the city. To ensure the downtown remains this heart of the community, as part of the larger Nanaimo Reimagined project, the City wished to develop a guiding design concept for the area. Mobycon, with partners Toole Design Group, developed a plan for Commercial Street with design concepts that would create a renewed sense of place and a human-scale streetscape. The team led a series of public engagement activities, ensuring residents and stakeholders were heard and that their vision was reflected in the designs. This was incorporated using storytelling to create a final report that reflected the history, culture, and spirit of Nanaimo's diverse community.

In ReImagine Nanaimo – the City's Official Community Plan – a set of nine principles were identified based on community feedback from the Discovery Week engagement sessions and were presented in a subsequent online survey. These were used throughout the remaining



phases of the project to help participants identify design elements that were integral for a successful design before being finalized and presented to and adopted by Council.

ICIP CYCLING NETWORK EXPANSION



The City of Guelph received an Investing in Canada Infrastructure Program (ICIP) grant to design and build 13 km of protected cycling infrastructure on three major corridors connecting downtown Guelph to surrounding neighbourhoods.

Mobycon, working alongside partner Dillon Consulting, was retained to develop and evaluate a total of 12 concept designs and four alternatives for each corridor. The goal: make sure All Ages and Abilities (AAA) cycling solutions could be achieved on each corridor. Community engagement and communications efforts ensured designs were reflective of public and stakeholder desires.

Mobycon used the easy-to-understand and visually appealing web-based design software Remix to share the concept designs. First, a digital representation of the existing conditions along each corridor was created. From there, design alternatives could be developed efficiently. A protected cycle lane, multi-use path, and cycle track option were developed for each corridor, applying national and international design best practices. Emerging cycling designs, landscaping, surface utilities, property, and operational impacts were also taken into consideration. The final concept designs will be used to inform the Environmental Assessment studies, detailed design, and construction over the next 10 years.



USA



COMMUNITIES ON THE MOVE

The UNC Center for Health Promotion and Disease Prevention and the Highway Safety Research Center (HSRC) received funding to support communities in encouraging higher levels of activity through active transportation.



THE FUTURE OF MONTAVA, FORT COLLINS, CO

HF2M, a large real-estate developer in Colorado, retained Mobycon to provide coaching services to develop a transportation system rooted in international best practices for the Montava development.



ROADWAY CROSS SECTION REALLOCATION: A GUIDE

The National Cooperative Highway Research Program (NCHRP) commissioned a study to develop a guidebook for agencies seeking to reallocate road space.



CALIFORNIA TRADE MISSION

Mobycon together with other Dutch organizational delegates, as well as representatives from the Dutch Royal family, including Queen Máxima, met together in a series of high-level engagements with elected officials from California.



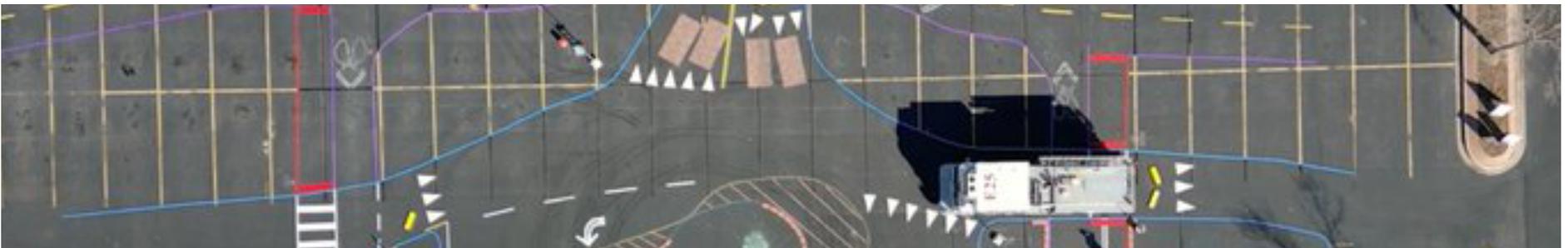
MINNESOTA ACTIVE TRANSPORTATION PROGRAM

In 2022, the Minnesota Department of Transportation (MnDOT) launched a program to improve active transportation across the state.



SAN DIEGO PURPLE LINE MULTIMODAL CORRIDOR PLAN

The San Diego Association of Governments (SANDAG) initiated the development of a Comprehensive Multimodal Corridor Plan (CMCP), evaluating the transportation components for the Purple Line .



COMMUNITIES ON THE MOVE

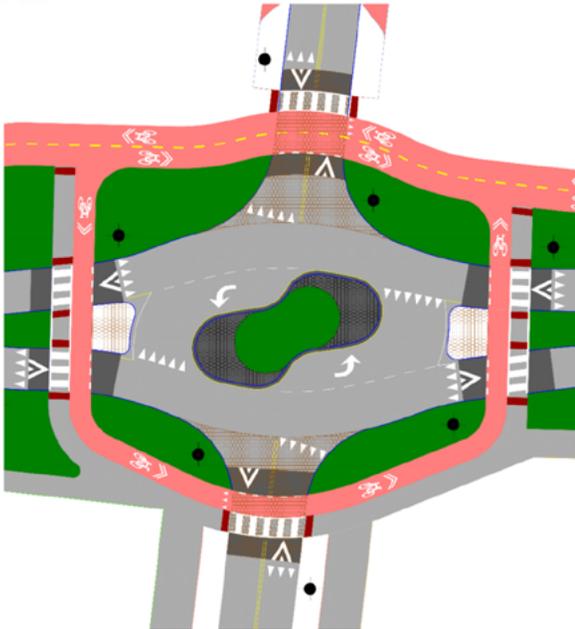


The UNC Center for Health Promotion and Disease Prevention and the Highway Safety Research Center (HSRC) received funding to support communities in encouraging higher levels of activity through active transportation. The Communities on the Move program, started in 2018, has two main goals: to reduce the prevalence of diabetes in marginalized communities and to increase public participation in the decision-making process.

In 2022, the Mobycon team supported the on-site research of a team of community-based interns who embarked on a summer of activities centered around evaluating their neighborhood and identifying opportunities for

improvement. In July, Mobycon led an in-person workshop with the interns to build on their research. The workshop included mapping and brainstorming activities and resulted in a list of possible short- medium- and long-term projects to improve active mobility conditions in the community. The interns presented their ideas during a community event which brings residents and decision-makers together to walk, ride, or roll a loop around the neighborhood with an eye to improving the safety and comfort of that experience. Mobycon is now supporting the creation of a comprehensive report which summarizes findings from all phases of this project to support future improvements and inform further research.

THE FUTURE OF MONTAVA, FORT COLLINS, CO



HF2M, a large real-estate developer in Colorado, retained Mobycon to provide coaching services to develop a transportation system rooted in international best practices for the Montava development. Working with Kimley-Horn, Mobycon developed a concept and delivered a detailed design for a highly innovative intersection typology that has not been used in the US before. This type of intersection (the “Kidney Bean” or “Dutch Left” intersection) allows for prioritized movement along one axis while forcing drivers from the side street to yield. This design removes the need for traffic signals thus greatly improving flow while maintaining a high level of safety and comfort.

Through a collaborative design process, the project focused on developing designs that work in the US context, progressing from high-level concepts to detailed designs. Mobycon and Kimley Horn worked together effectively by applying Dutch design principles in the US regulatory framework. In the fall of 2022, Montava tested the intersection design in a pop-up event and the results will be analysed and inform the permanent designs.



A NEW APPROACH TO ALLOCATING ROADWAY SPACE

Streets make up more than 90 percent of public space in cities and towns. Who gets to use this space and how they can use it affects a community's mobility, safety, economy, and quality of life. For many years, streets have been designed to emphasize mobility for vehicles over the needs and safety of other street users. This book will help you think through how to allocate roadway space to reflect your community's true priorities.

1 Define your limits and set your goals.

How much space do you have to work with? What purpose does the road serve? What are your community's priorities?

2 Consider the context through a safety lens.

A safe street must be safe for all users. Determine the minimum safe travel space for people walking, bicycling, riding transit, and driving.

3 Is there enough space to build a safe road?

NO Work within your constraints to ensure safety. What do you want to achieve beyond safety?

4 Overcome the physical barriers to safe road design.

Reduce dimension needed for driving. Lower speed. Convert two-way to one-way. Reduce dimension needed for bicycling/walking. Reduce vehicle volumes. Close street to traffic. Safe parallel facility. Convert to shared street (woonerf).

5 Develop design options: what happens when you change your cross section?

Choose a few suitable alternatives to evaluate. The community priorities from Step 1 may make some options more desirable.

Water Sidewalk, Bus-Only Lanes, Onstreet parking, Add Traffic Lanes, Median, Water Bike Lanes.

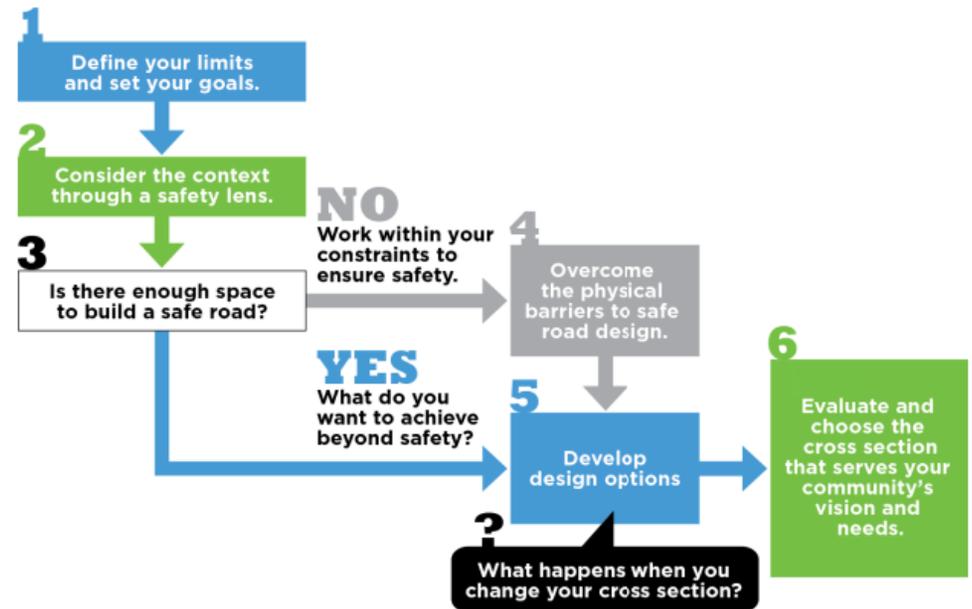
6 Evaluate and choose the cross section that serves the community's vision and needs.

Compare the library outcomes of the alternatives you developed in Step 5.

LEARN MORE!
Read the guidebook
Download NCHRP 13-78: Guidebook for Cross-Section Trade-Offs

The Decision-Making Framework helps community members, practitioners, and decision makers understand the full impact of road design decisions.

ROADWAY CROSS SECTION REALLOCATION: A GUIDE



The National Cooperative Highway Research Program (NCHRP) commissioned a study to develop a guidebook for agencies seeking to reallocate road space. The goal was to provide guidance for evaluating the trade-offs of different complete street cross-sections for reconstruction and retrofit projects.

As a subconsultant to Kittelson & Associates, Mobycon conducted an extensive literature and best practice review. With experience working in the Netherlands and Europe, the team ensured international best practice was incorporated into the guidebook that pushed the envelope for cross-section reallocation and valued a complete street design. This approach considered the function of a street within the broader road network for more intuitive and appropriate roadway reallocation guidance.

Research efforts also included an agency peer exchange with professionals around the world. These interviews, alongside the literature review, were used to inform the

development of a decision-making framework that considered elements beyond the pavement. Such elements included the surrounding land use, community goals, justice, economic considerations, and mode share targets.

Additionally, a roadway reallocation tool was incorporated into the guidebook, allowing users to input existing conditions and agency priorities in a tool that would recommend cross-sections based on best practices. The guidebook is currently in the form of an interim draft and is anticipated to be published in 2023.



CALIFORNIA TRADE MISSION



In September 2022, Mobycon joined a number of Dutch organizational delegates on a trade mission to California, which also include her Majesty Queen Máxima, Princess of the Netherlands, Princess of Orange-Nassau, representing the Dutch Royal family. During the two-week event they met for a series of high-level engagements with elected officials from California. This including Lieutenant Governor Eleni Kounalakis, Mayor London Breed of San Francisco, and Mayor Eric Garcetti of Los Angeles.

Together the delegation got to witness and discuss an overview of the progress California has been

making in regard to mobility, and its push towards green and alternative forms of transit. Mobycon and the delegation offered their own insights, providing Californian officials with a taste of the Dutch mobility experience, and a sense of what lessons can be learned and applied to the Californian context.

In addition to the time spent in San Francisco and Los Angeles, Mobycon also delivered a ThinkBike Workshop in Santa Cruz. There participants were able to learn more about good principles for network planning, Infrastructure design, and bicycle policy.



MINNESOTA ACTIVE TRANSPORTATION PROGRAM



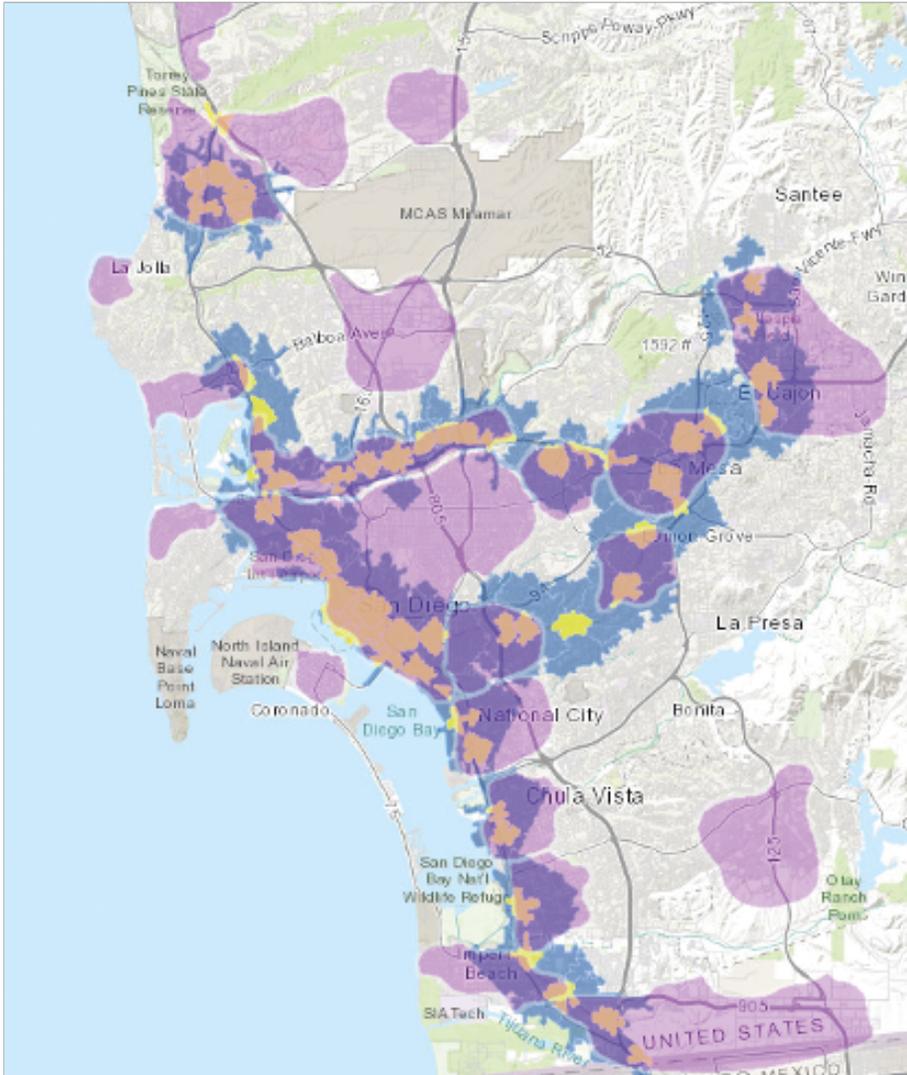
In 2022, the Minnesota Department of Transportation (MnDOT) launched a program to improve active transportation across the state. In a team led by Terra Soma, Mobycon is collaborating to provide active mobility and demonstration project support using the place-based and human-centered approach called The Great Street, Healthy Places, combining frameworks from Terra Soma and Mobycon. This approach offers communities tools to apply to create smarter, safer, healthier environments that better balance the spatial needs of users,

enhance the quality of the public realm and increase walking and cycling access for all.

Running for three years, the program will deliver 42 Active Transportation Plans, 12 demonstration projects, statewide trainings, and other active transportation resources. The program is organized into three tasks. The first is focused on providing planning assistance, working with Terra Soma and MnDOT to develop Active Transportation Action Plans in 42 communities. In the second task, MnDOT and communities are

supported in designing and implementing demonstration projects. The final task provides non-infrastructure support through trainings on transportation equity and justice, and international active travel best practices. Together these tasks will better position communities for long-term impact, encourage infrastructure investments, and other shifts that can result in long-term systems and behavior changes.

SAN DIEGO PURPLE LINE MULTIMODAL CORRIDOR PLAN



The San Diego Association of Governments (SANDAG) initiated the development of a Comprehensive Multimodal Corridor Plan (CMCP), evaluating the transportation components for the Purple Line – a regional transit corridor spanning approximately 30 miles (48 km) along the I-5 and I-805 freeways. Mobycon, working as a subconsultant to HNTB, was retained to provide expertise on the active transportation components of the CMCP. Mobycon’s efforts included the identification of gaps, deficiencies, and opportunities in existing documents and the provision of best practice policies, programs, and street typologies.

With an understanding of the various Active Travel (AT) networks and their connection to those in neighbouring jurisdictions, Mobycon provided best practice solutions that fit within the local context, leading to the development of hypothetical AT networks for 14 mobility hubs within the study area. Using ArcGIS software, Mobycon’s knowledge of AT network planning principles and cycle facility selection tool, cycling network recommendations were developed for the corridor and Mobility Hubs to connect the region through active modes and last-mile connections to transit.



DACH REGION (GERMANY, AUSTRIA, SWITZERLAND)



MOBILITY DONUT IN OSTERODE, GERMANY

Osterode am Harz is a small city in the middle of Germany. The city is facing several challenges including a high level of private car ownership and usage, as well as shops and services in the city center struggling economically.



GERMANY, DORTMUND SCHOOL ZONES

Mobycon developed a mobility management project for local elementary schools. The aim of the project was to encourage children to walk or cycle to school instead of being driven.



GERMANY, DUSSELDORF GENERAL MOBILITY MASTERPLAN

Together with a partner agency, engineering firm NTS from Münster, Mobycon continued work on work package 3 of the Mobilitätsplan D of the state capital Düsseldorf.



GERMANY, COLOGNE SUSTAINABLE URBAN MOBILITY PLAN

In October 2022, the consortium of MiB (Mobility Institute Berlin), OE (Orange Edge), and Mobycon began work on the development of a Sustainable Urban Mobility Plan (SUMP) for the city of Cologne.



SWITZERLAND, BERN VERKEHSPLANUNG

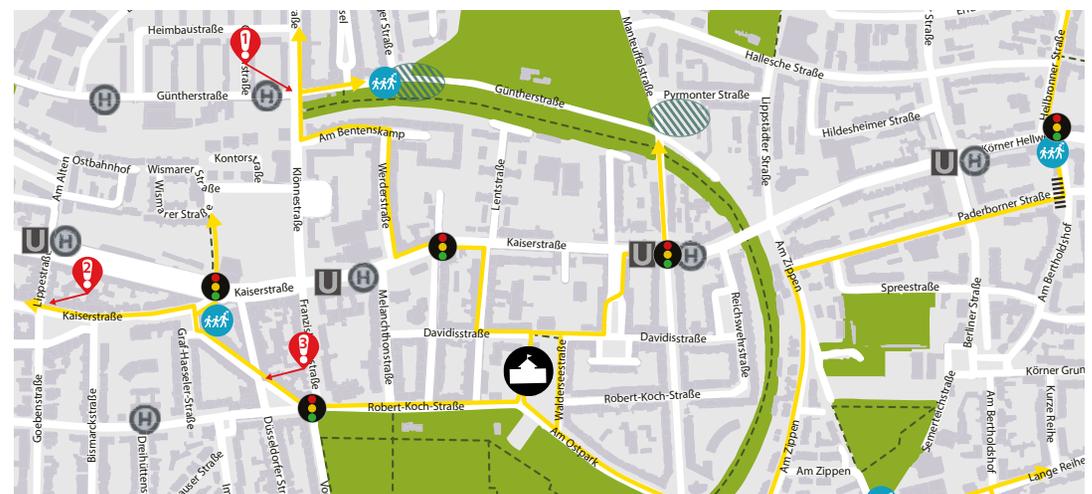
In 2020, the Traffic Planning Department of the Directorate of Civil Engineering, Transport and Green Spaces of the City of Bern (Switzerland) commissioned Mobycon to conduct a preliminary study investigating the design of an intersection as a “protected intersection” based on the Dutch model.



DORTMUND SCHOOL ZONES

As part of Dortmund Germany's City-Wide Emission-Free Programme (*Stadtluft ist (emissions-)frei - Dortmunds Einstieg in eine emissionsfreie Innenstadt*) Mobycon developed a mobility management project for local elementary schools. The aim of the project was to encourage children to walk or cycle to school instead of being driven. The participating schools were enthusiastic for a change, as the so-called "parent cabs" caused chaos in front of the school every morning. The project had a multi-faceted approach to promote safe and healthy mobility among children and young people.

The first part of the project was a survey to understand the current situation, bottlenecks, and other challenges of the community. Based on these results, as well as traffic safety data and site visits, new safe routes to school maps were created for each of the nine schools. These maps included the safest walking and cycling routes to school. In addition, new pick-up and drop-off zones for cars were proposed and Walking Buses were (re)introduced. The *Traffic Tamer* programme was introduced to encourage behaviour change through play, where classes were rewarded for their participation. Mobycon created additional measures for further mobility solutions for the future and organized an online workshop with the schools.



DUSSELDORF GENERAL MOBILITY MASTERPLAN



Together with a partner agency, engineering firm NTS from Münster, Mobycon continued work on work package 3 of the Mobilitätsplan D of the state capital Düsseldorf. This project focused on the development of targeted strategic measures to be completed in this decade, with proposals and measures developed for cycling and traffic safety. Special attention was paid to the further development of Düsseldorf's cycle parking strategy. The goal of the City is to change the modal split away from the car and towards more cycling, walking, and public transport.

Mobycon contributed to the coordination processes and the discussions between the City and the consortia from the other three work packages to create an integrated, overarching network and sustainable streetscape design for all modes and road users. In the consortium, attention was primarily on designing a network for walking and cycling, but this can only be achieved by an integrated approach to creating networks for all road users. Among other things, recommendations for hierarchical

recommendations we developed, aligning road and cycling infrastructure, and linking them to the Dutch principle of “intuitive road design.”

The Masterplan Mobilität was also delivered for the Heinrich-Heine-Universität in the city of Düsseldorf. this included measures to reduce CO2 emissions and improve the attractiveness of the campus. Finally, an evaluation of existing plans for changing tram lines and a cycle highway was conducted.

COLOGNE SUSTAINABLE URBAN MOBILITY PLAN

In October 2022, the consortium of MiB (Mobility Institute Berlin), OE (Orange Edge), and Mobycon began work on the development of a Sustainable Urban Mobility Plan (SUMP) for the city of Cologne. The plan will follow all EU guidelines for the project. The consortium will develop the content of the SUMP within the first phase of the process, within which the vision, goals, targets, indicators, and strategy will be delivered in 2024.

The SUMP will be co-created with a second consortium who will oversee the process and communication, as well as the city administration, and other stakeholders. The SUMP will be informed by previous analysis that conducted by Mobycon in 2021 of the relevant political decisions, concepts, data, and the current situation in Cologne regarding walking, cycling, and car traffic. Special attention was paid to the challenge of integrating all infrastructure in the networks for the different modes in Cologne.



 European Platform
on Sustainable Urban
Mobility Plans

BERN VERKEHSPLANUNG

In 2020, the Traffic Planning Department of the Directorate of Civil Engineering, Transport and Green Spaces of the City of Bern (Switzerland) commissioned Mobycon to conduct a preliminary study investigating the design of an intersection as a “protected intersection” based on the Dutch model. The goal was to make one of the city’s most important intersections more attractive and safer for pedestrians and cyclists. This project was completed in mid-2022 and turned over to the City of Bern for implementation.

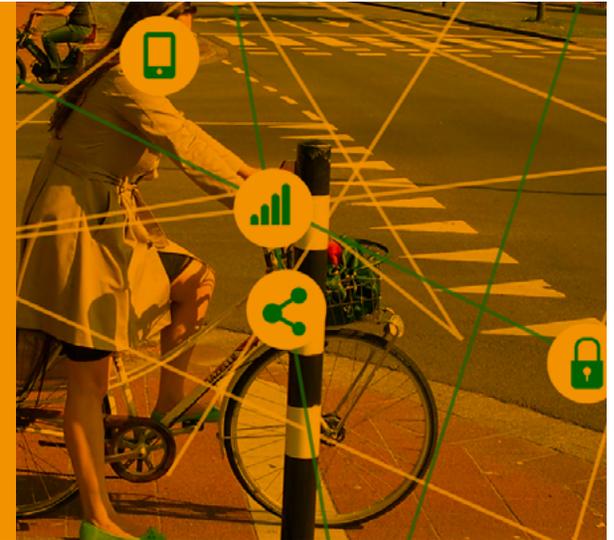
As a result of this successfully completed project, the City of Bern engaged Mobycon for a follow-up project. This includes the preparation of various ideation sketches of how a cycle path can be designed across the Bahnhofplatz and its surrounding area. The project area experiences high traffic volumes of all kinds. The goal is to find a solution that takes into account public transport, active transportation - i.e. pedestrian and cycle traffic - as well as private transport, and allows them to co-exist harmoniously.

At the end of 2022, four different sketches were created, representing three variants of bi-directional cycle lanes (located on the right, on the left and in the middle of the road) and one variant with uni-directional bike lanes located on the right and on the left of motorized traffic. These have been summarized in a report and presented to the City of Bern for review and decide which variant is preferred.





THE NETHERLANDS



BITS PROJECT, EUROPE

Bicycles and Intelligent Transport Systems (BITS) was a project in which cities, regions, universities, and other organizations from five countries worked together to implement ITS applications and set up a European platform for cycle data.



CYCLE PARKING STRATEGY AND IMPLEMENTATION PLAN IN EINDHOVEN

Anticipating demographic growth in the coming years, the City of Eindhoven is planning to adapt its mobility strategy towards a low-traffic city centre, including high-quality public spaces, and a modal shift towards less space-consuming and polluting mobility solutions.

CYCLING FOR EVERYONE

The Dutch Ministry of Infrastructure and Water Management hired Mobycon to analyse and create a report on the accessibility of the cycle system in the Netherlands, and the correlation with cycle ownership, focused on children between 6 and 17 years old.



DISCUSSION MEMORANDUM ON THE DESIGN CHARACTERISTICS OF GOW30

In August 2022, the Ministry of Infrastructure and Public Works and Rijkswaterstaat and CROW, commissioned Mobycon to write a discussion paper with recommendations for the design characteristics of the GOW30. "A GOW30 road is an often implemented distributor road in the Netherlands, but with unclear design characteristics.

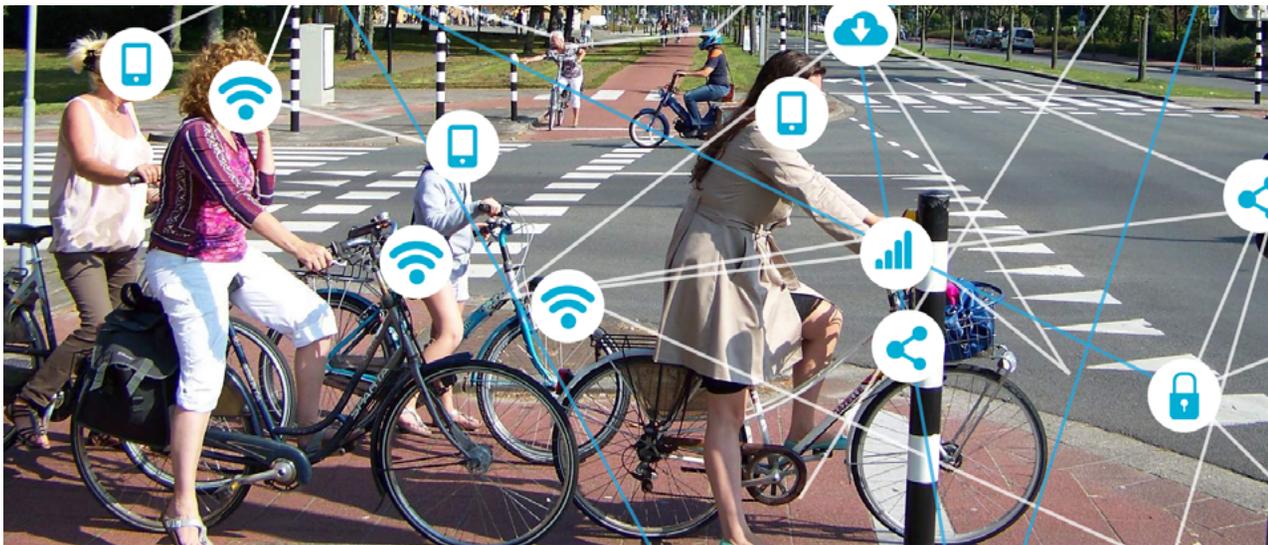


TRAFFIC SAFETY EXPERT TEAM IN BRABANT

In July 2022, the Province of North Brabant commissioned Mobycon to join the expert team for Traffic Safety Brabant, working together with local partners, Henk Schravemade, and SHIFT behavioral change.



BITS PROJECT, EUROPE



Bicycles and Intelligent Transport Systems (BITS) was a project in which cities, regions, universities, and other organizations from five countries worked together to implement ITS applications and set up a European platform for cycle data. Leading the project management, Mobycon and our partners helped fifteen ITS implementations become operational by 2021, with another eleven pilots starting up. Examples of the implementations include: the bicycle parking information system in Bruges, the bicycle rally app for businesses in Oldenburg, Safety by radar in Aarhus, smart cameras and software for incident detection in Zwolle, and the [BITS CycleDataHub](#) (a portal for cycling data).

The results of the BITS project were presented at conferences like Velo-City2021 in Lisbon, the ITS World Congress in Hamburg, as well as numerous online events from the European Week of Regions and Cities, to the Intertraffic ONAIR show. During the CIE 2021 Summit, BITS was highlighted in Matthew Baldwin’s keynote address (deputy director general DG MOVE). In June 2021, the North Sea Region Program approved an extension of the project for another nine months (late 2022). This allowed the welcoming of three new partners: the Municipality of Oldenburg, Deelfiets Netherlands, and Cycledata.

CYCLE PARKING STRATEGY AND IMPLEMENTATION PLAN IN EINDHOVEN

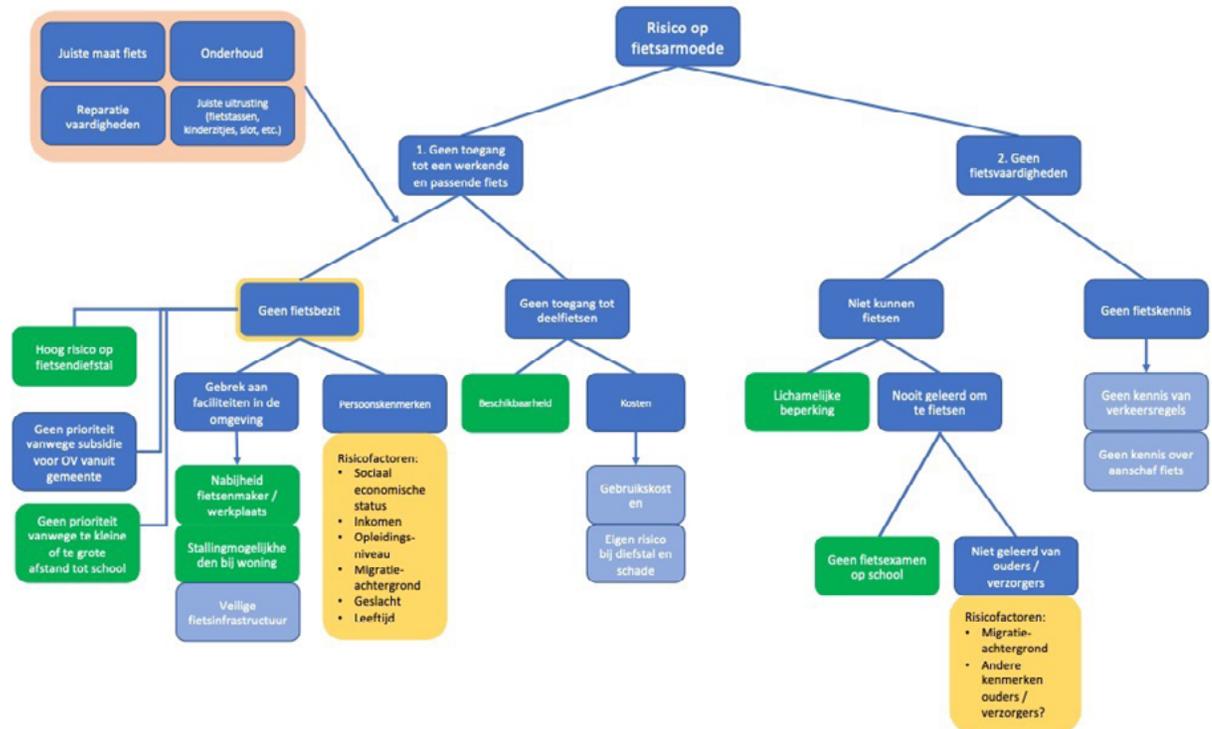


Anticipating demographic growth in the coming years, the City of Eindhoven is planning to adapt its mobility strategy towards a low-traffic city centre, including high-quality public spaces, and a modal shift towards less space-consuming and polluting mobility solutions. In addition, the issue of poorly parked cycles on downtown streets during peak hours of activity is a major concern. This not only causes a nuisance and crowded streets, but the “wildly” parked cycles can obstruct the emergency lanes for the emergency services.



To address this issue and achieve a cleaner cityscape, the Municipality of Eindhoven set a target for doubling its cycle parking capacity by 2030 (representing 7,000 additional cycle parking spots). After working on Eindhoven’s 2021 parking strategy, Mobycon was asked to develop an implementation plan for cycle parking to achieve these goals. A series of mid- to long-term action items were developed to reach the goals, including the creation of new parking spots, 2/3 in secured cycle parking facilities within buildings (existing and new ones), and the rest as on-street facilities. Furthermore, a set of recommendations including solutions was shared to address the “peak hours cycle parking” phenomenon on a short-term scale.

“CYCLING FOR EVERYONE” REPORT FOR THE DUTCH MINISTRY OF INFRASTRUCTURE AND WATER MANAGEMENT

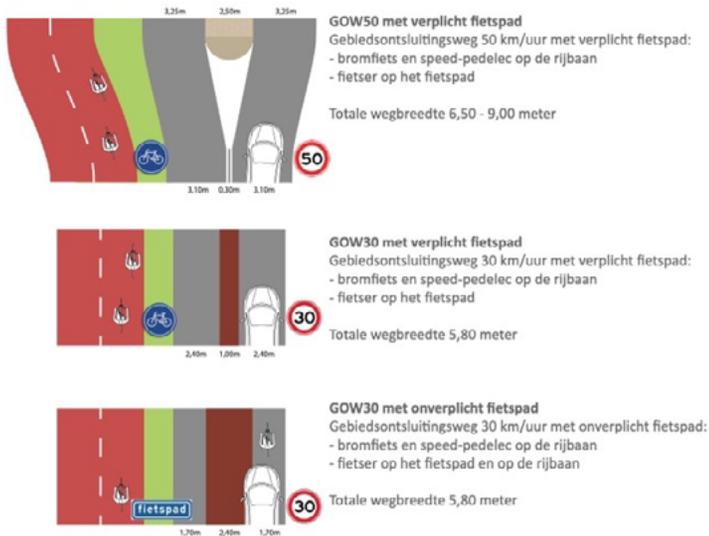


The Dutch Ministry of Infrastructure and Water Management asked Mobycon to analyse and create a report on the accessibility of the cycle system in the Netherlands, and the correlation with cycle ownership, focused on children between 6 and 17 years old. A theoretical framework was set up to present the indicators related to a higher risk of “cycling poverty.” The lack of access to a functional and suitable cycles and the lack of cycling skills were some of the major barriers to an inclusive system. Data on Dutch mobility customs was analysed to pull concrete facts and figures from these indicators. On a national scale, 22% of the population hardly or never cycles and 12% do not own a cycle. A correlation between low cycle use/ownership and specific demographic data—such as a non-occidental migration background or a low level of education or income—was highlighted,

as well as the divide in high-urbanized areas where even fewer children tend to cycle/own a cycle. It was also noted that a more inclusive access to the cycle network would enable children to reach their destinations more easily and at a lower cost so that they can seize more opportunities in society and actively improve their health.

Progress can still be achieved in the collection of data to better assess the evolution of the cycle practice/ownership in the Netherlands. It is also important to steer the research towards less well-known factors related to cycle skills or other influencing factors such as parking options, distance to ride, assets, and lack of shared-cycles systems.

DISCUSSION MEMORANDUM ON THE DESIGN CHARACTERISTICS OF GOW30



In August 2022, the Ministry of Infrastructure and Public Works and Rijkswaterstaat and CROW, commissioned Mobycon to write a discussion paper with recommendations for the design characteristics of the GOW30. The GOW30 is a new road type that still is in development and therefore did not exist when Sustainable Safety was introduced in the early 1990s. According to various experts, this solution will contribute to more 30 km/h roads in the city, and in turn, contribute to safer and more liveable cities. With the completion of the GOW30 framework, the next question arose: what does a GOW30 look like?

Mobycon began by conducting a literature review in order to determine what criteria a GOW30 should meet to distinguish it from other road types, and that communicates clearly to road users what is expected of them. The findings were shared with a working group and a separate group of Mobycon experts to understand to what extent there is support from road authorities, emergency services, etc., for the proposed design requirements. Mobycon is currently working to finalize the memorandum and submit it to CROW, the working group, and the experts involved for review and approval.



TRAFFIC SAFETY EXPERT TEAM IN BRABANT

In July 2022, the Province of North Brabant commissioned Mobycon to join the expert team for Traffic Safety Brabant, working together with local partners, Henk Schravemade, and SHIFT behavioral change. Through the road safety expert team, the Province of North Brabant wants to support its partners in improving road safety.

The province, municipalities, police and Rijkswaterstaat can contact the expert team for almost all questions regarding traffic safety. For example, it is possible to get support with grant applications within the framework of the Regional Mobility Plans and the Impulse Regulation Traffic Safety of the national government. Support can also be called on when setting up behavioral campaigns or monitoring and evaluating studies.

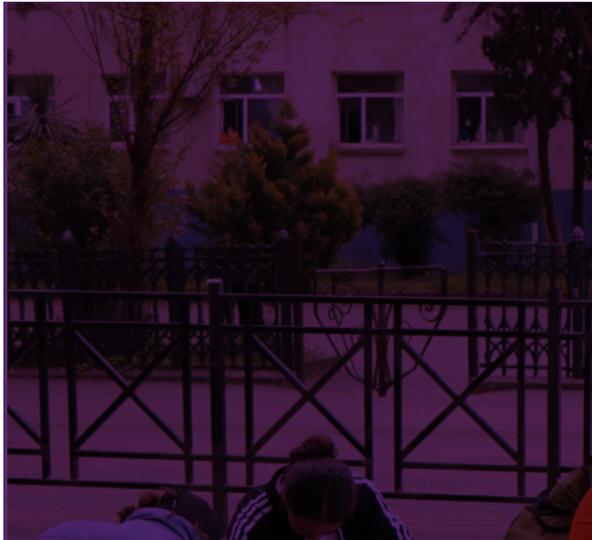
Furthermore, the expert team can provide support with questions about infrastructural bottlenecks and proposed solutions or intensified cooperation between road authorities and enforcement organizations. Our experts Babet Hendriks, Henk Schravemade, Robin Kleine, Roos Alink, and Marc Schenk cover the broad spectrum of possible questions, and, where necessary, they are supported by Mobycon colleagues.

In 2022 both the team and working arrangements were launched and the first questions have been put to the experts. In 2023, the team will continue to provide partners with advice.





INTERNATIONAL PROJECTS



CYCLEWAY REDESIGN DUBLIN, IRELAND

Mobycon was engaged by the Dublin City Council to deliver a concept design of high-quality, safe cycling infrastructure on the 2km Rathmines-Milltown route.



THINKBIKE TIRANA, ALBANIA

Over the last few years, the city of Tirana has begun to transform into a cycling city. While the results are impressive, there are still some safety and design issues with the existing infrastructure, particularly regarding the width of the cycleways and at the intersections.



DENMARK CYCLING NODE NETWORK

Denmark is planning to create a *knudepunktsnetværk*, a nodal recreational cycling network, in the coming years, connected by cycling-friendly routes within the existing infrastructure.



CYCLING MASTERPLAN IN PROVENCE-ALPES AGGLOMÉRATION AND SAINT-MARCELLIN, FRANCE

Mobycon collaborated with Evo Pods, a French consultancy, to provide Dutch expertise in designing safe intersections and crossings for two communities in France.



TBILISI, GEORGIA CYCLING MASTERPLAN

In response to Mobility4Cities's request, Mobycon, with the support of local consultancy STS, developed a Tbilisi Cycling Masterplan in collaboration with Tbilisi City Hall and local stakeholders.



GIZ SAFE WAY TO SCHOOL IN BATUMI, GEORGIA

As part of the Sustainable Mobility in the South Caucasus project (Mobility4Cities) and its Safe Way to School program, a tactical urbanism school street pilot was developed at N14 Public School of Batumi, Georgia



CYCLEWAY REDESIGN DUBLIN, IRELAND



A key part of Dublin's transportation network is the 2km Rathmines-Milltown route, a street subject to an extensive rapid bus transport system. A residential street, it is also home to student housing, local businesses, parks, and universities, making it a key cycling route in the city.

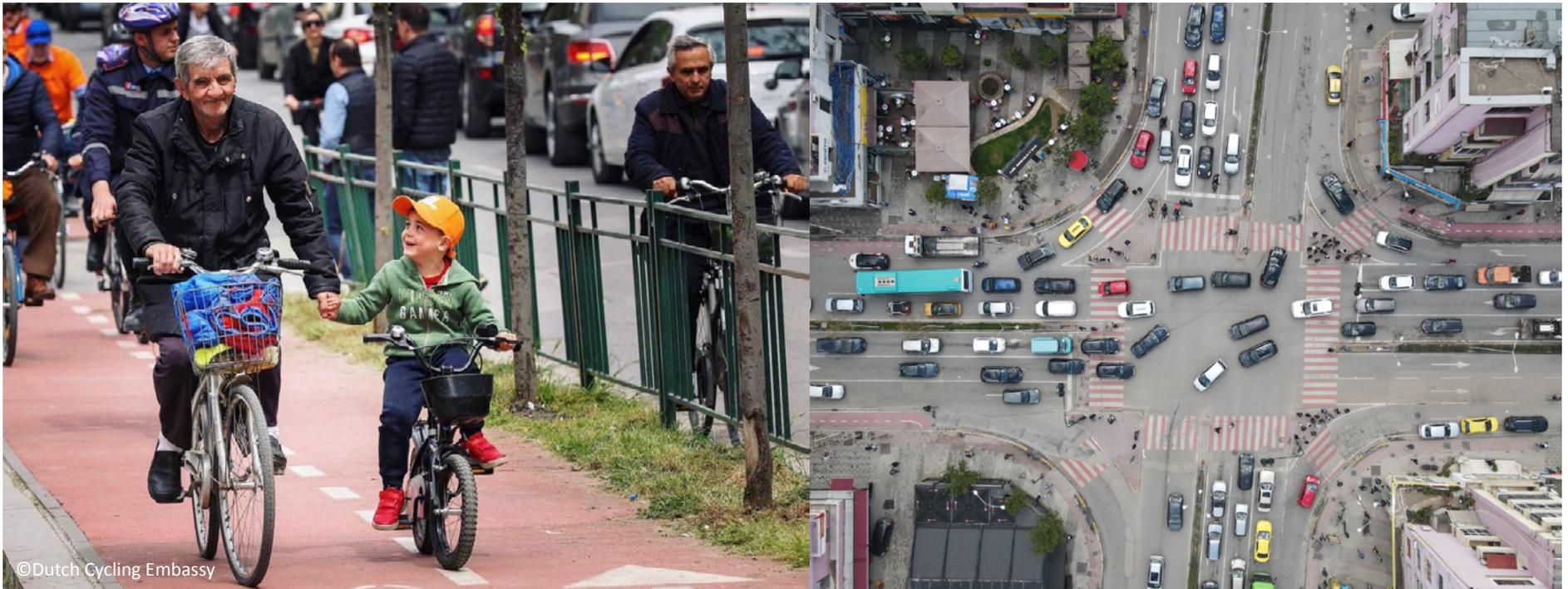
Mobycon was engaged by the Dublin City Council to deliver a concept design of high-quality, safe cycling infrastructure on this route.

When creating the designs of the physically separated cycling infrastructure there were many challenges that needed to be addressed: The Dublin City Council's aspirations, the requirements of Irish law, guidelines of on-street parking, and the narrow spatial quality of the route were all factors that needed to be addressed and balanced.

Two conceptual designs were created using Adobe Illustrator and ArcGIS - an interim

conceptual design with a bollard protected unidirectional cycle lane on either side of the road, and a long-term design option with a raised cycle lane on either side. Both designs were presented to the Dublin City Council who will share it with the community for feedback. Mobycon was commended by Dublin City Council on a commitment to high-quality and safe cycling infrastructure, even when this conflicted with their initial aspirations.

THINKBIKE TIRANA



©Dutch Cycling Embassy

Over the last few years, the city of Tirana has begun to transform into a cycling city. While the results are impressive, there are still some safety and design issues with the existing infrastructure, particularly regarding the width of the cycleways and at the intersections. Following previous work on proposed cycling networks for the city, Mobycon, alongside the Dutch Cycling Embassy, held a multiday ThinkBike Workshop in April 2022 in Tirana with local decision-makers, planners, and cycle advocates. The aim was to discuss how the city can achieve a more sustainable transportation sector, specifically cycling as a safe transport option.

One main point of discussion in the workshop was how to implement 30 km/h zones in Tirana. The workshop also highlighted that Tirana must invest a concerted effort in three areas: hardware, software, and orgware. Hardware is the physical element of the built environment. Software is the mental and virtual elements: the ideas, plans, policies, programs, and laws - as well as behavioural change and cycling stimulations. Orgware is the organizational and institutional elements, such as communication, administrations, and governments.

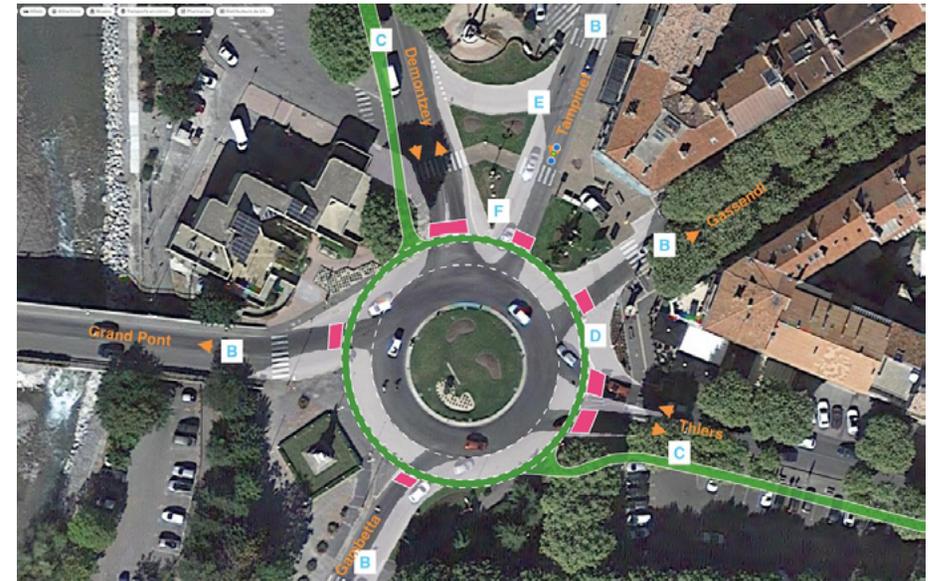
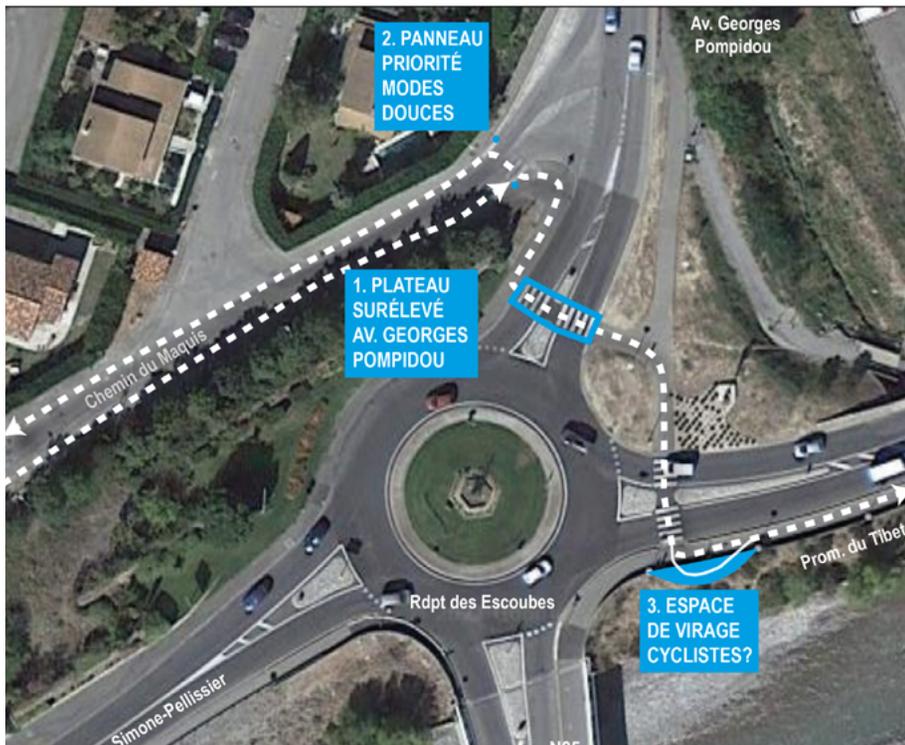
DENMARK CYCLING NODE NETWORK



Denmark is planning to create a *knudepunktsnetværk*, a nodal recreational cycling network, in the coming years, connected by cycling-friendly routes within the existing infrastructure. The network will be realised by incorporating inspiration from similar cycle hub networks in other cycling-friendly countries, such as the Netherlands, Germany, and Belgium. Moybcon, together with NIRAS A/S and Folkersma, have been consulted to assist in the formation of this *knudepunktsnetværk*, through the creation of a manual for a national roll-out.

All cycle routes will be based on the five CROW principles: attractiveness, directness, coherence, safety, and comfort. These five principles ensure that the cycling network is designed with the end user, the cyclists, in mind. Understanding that this network will be for recreational purposes, comfort, safety, and attractiveness will be guiding priorities when identifying routes included in the *knudepunktsnetværk* of Denmark. Furthermore, Csikszentmihaly's Flow Theory will be evaluated to see if it can be utilized to develop a metric for cycling happiness, to be employed to further enhance route selection.

CYCLING MASTERPLAN IN PROVENCE-ALPES AGGLOMÉRATION AND SAINT-MARCELLIN



Mobycon collaborated with Evo Pods, a French consultancy, to provide Dutch expertise in designing safe intersections and crossings for two communities in France: Saint-Marcellin Vercors Isère Communauté (SMVIC) and Provence-Alpes Agglomération (PAA, centred on the city of Digne-lès-Bains). The two communities want to improve their cycling networks to address two

challenges. In SMVIC, one of the key issues is the mobility of young and elderly people who represent 46 % of the population. In PAA, the car represents 70% of the modal share of the city Digne-lès-Bains, which makes the accessibility to the city centre dominated by this means of transport. They want to increase cycling rates, specifically on commuting and local trips between city-centre and outskirts, as well as improve the economic and touristic development of the areas. The two communities adopted a cycling masterplan with a clear vision to help the local authorities transform their cycling network into a more consistent and continuous one; an essential gap that France will have to fill to develop itself as a cycling nation.

TBILISI CYCLING MASTERPLAN



Tsabadze Ave Sketch short term



Tsabadze Ave Sketch long-term

In response to Mobility4Cities’s request, Mobycon, with the support of local consultancy STS, developed a Tbilisi Cycling Masterplan in collaboration with Tbilisi City Hall and local stakeholders. This project aimed at shifting the way people move about the districts of Tbilisi and broadening the number of cyclists on city streets. Extensive community engagement was conducted through stakeholders’ interviews, walking and cycling tours, and in-person workshops. The feedback from these sessions informed the concept cross sections and design sketches for specific streets of the study area. These concept designs were used to inspire the municipality to think differently about street design and the choices necessary to make cycling an attractive mobility choice.

Mobycon delivered recommendations around planning compact cycling districts throughout the city, multi-modal connectivity, the development of a well-connected cycle network, the growth of a cycling culture via marketing and services, as well as strategies to align the network with the needs of the different target groups. In addition, an implementation timeline for cycling infrastructure was created with short-, medium-, and long-term actions. Once these actions have been completed, Tbilisi will have an extensive cycling network that truly lifts the capital of Georgia to the status of a cycle-friendly city.

GIZ SAFE WAY TO SCHOOL IN BATUMI



As part of the Sustainable Mobility in the South Caucasus project (Mobility4Cities) and its Safe Way to School program, a tactical urbanism school street pilot was developed at N14 Public School of Batumi, Georgia. Together with Mobility4Cities and the Black Sea Academy, Mobycon held a walk-in café community event at the end of 2021 to gather input and begin planning for the temporary intervention. The feedback that was collected informed the pilot in the spring of 2022.

For six days, the street in front of the N14 Public School was closed to car traffic and parking. Together with the pupils, their parents, the school staff as

well as the Batumi City Hall, the team transformed the new public space and showed what could be possible when it was open to people. Over the six days, workshops and other activities were held, data was collected, and a newly liberated space was created.

This Safe Way to School Tactical Urbanism Pilot served as a showcase of how tactical urbanism interventions can support the process of creating safe ways to school for children. Mobycon created a guidebook with the results of this experimentation so that other municipalities of the country can benefit from the accumulated knowledge.



INTERNATIONAL PARTNERSHIPS



WOMEN MOBILIZE WOMEN

The Transformative Urban Mobility Initiative (TUMI) under its Women Mobilize Women (WMW) programme engaged Mobycon's Communications and Engagement Advisor, Melissa Bruntlett, to provide gender and mobility content expertise.



WORLD RECOURCES INSTITUTE

Mobycon partnered with the World Resources Institute (WRI) as an expert consultant to provide coaching services to WRI partner cities.



TRANSPORT DECARBONISATION ALLIANCE

The decarbonization of the global road transportation sector can lead to a global reduction of emissions by no less than 12%.



JOINT VENTURE WITH SPACKMAN MOSSOP MICHAELS IN SYDNEY, AUSTRALIA

New South Wales, Australia, has recently seen a significant increase in investment in cycleways.

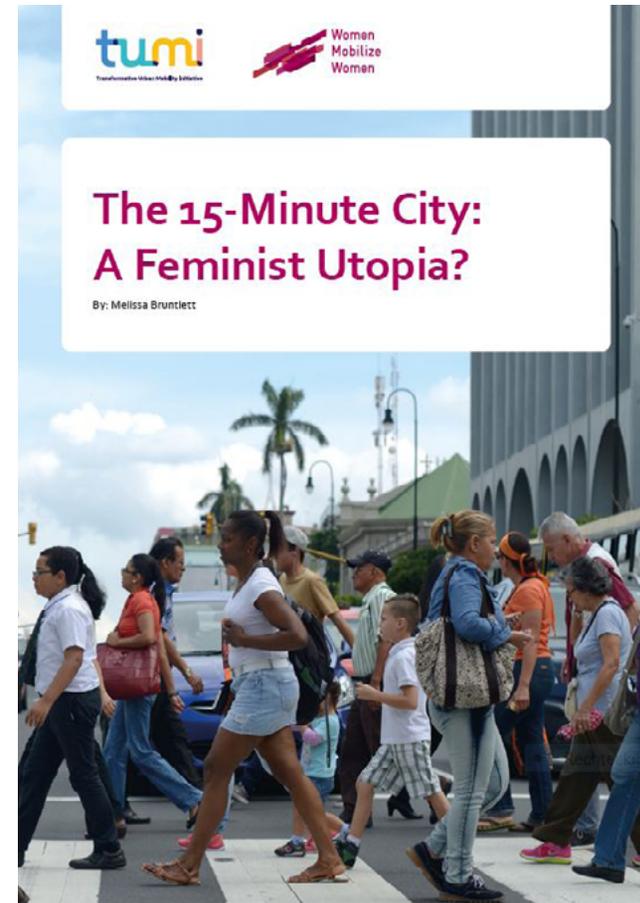


WOMEN MOBILIZE WOMEN

The Transformative Urban Mobility Initiative (TUMI) under its Women Mobilize Women (WMW) programme engaged Mobycon's Communications and Engagement Advisor, Melissa Bruntlett, to provide gender and mobility content expertise. WMW's objective is to analyse the gendered aspects of urban mobility, contributing to and raising awareness of gender-inclusive mobility among planners and decision-makers in the transport sector. As a WMW ambassador, Melissa Bruntlett supports this endeavour through the development of white papers, including a May 2022 publication, *The 15 Minute City: A Feminist Utopia?*, as well as managing international outreach, supporting the launch of various campaigns, such as the Gender Data Campaign in late 2022, and the Annual Remarkable Women Report.

Looking into the future, feminist development policy and gender mainstreaming will be important dimensions to work on. Opportunities for knowledge sharing and capacity building for those who identify as women in the sector will continue to be a prioritised avenue. Study tours with high-level decision-makers from around the globe are one direction in which Mobycon is enthusiastic to pursue.

Engaging in the improvement of the visibility and empowerment of women in the transport sector, Mobycon's work with WMW can address the linkage between equitable transport and sustainable transport. Through this connection, a deeper understanding of what a feminist perspective means for the transport industry, and why it deserves more attention.



WORLD RESOURCES INSTITUTE



Mobycon partnered with the World Resources Institute (WRI) as an expert consultant to provide coaching services to WRI partner cities. This on-call relationship enables the team to assist partners with pre-identified, individual mobility challenges. This collaboration has included supporting the development of a non-motorized transport strategy for Addis Ababa, Ethiopia; supporting the creation of a cycle facilities design guide in Vietnam; providing feedback on knowledge-sharing efforts for open streets and pop-up cycle lanes in multiple Asian cities; and advising on a nationwide mobility survey in Brazil.

Working with WRI facilitates a connection to an international team with knowledge of best practices that can be applied globally. Additionally, the opportunity for Mobycon to work with partner cities outside of European and North American markets provides the team with a more diverse understanding of what global cities are experiencing during their sustainable transportation transitions.

Mobycon looks forward to fostering this relationship and continuing working with and sharing knowledge and expertise with WRI partner cities.



TRANSPORT DECARBONISATION ALLIANCE



The decarbonization of the global road transportation sector can lead to a global reduction of emissions by no less than 12%. Mobycon recognizes the impact of this industry on the trajectory of climate change and has joined the Transportation Decarbonisation Alliance (TDA) to be part of the solution. The TDA is a unique collaboration between countries, cities, regions, and companies to accelerate the worldwide transformation of the transport sector towards a net-zero emission mobility system by 2050.

Mobycon's role focuses on contributing global best practices in active mobility, bringing together experts, and sharing knowledge on what works

and what doesn't work when it comes to sustainable urban mobility. This includes working together with TDA to write a call to action, calling on the participants of COP27 to invest more in capacity building for walking and cycling. This call to action is already supported by the Dutch Ministry for Transport, the World Resource Institute, UN Environment Programme, POLIS, and the Dutch Cycling Embassy.

By attending COP27, Mobycon aimed to find more cities and organisations that can benefit from a global capacity-building programme and to find funding partners that can make this initiative a reality.

JOINT VENTURE WITH SPACKMAN MOSSOP MICHAELS IN SYDNEY, AUSTRALIA



In recent years, New South Wales, Australia, has seen a significant increase in investment in cycleways. While funding for this decarbonised transportation system is gaining momentum, local capacity of the consultancy firms and municipalities to design and deliver the large demand for multiple new cycleway projects is lagging.

The City of Sydney reached out to Mobycon to fill this knowledge gap through workshops and capacity building. To address this, Mobycon and Spackman Mossop Michaels (SMM) developed an inter-continental partnership that was officially announced in December 2022. For the official

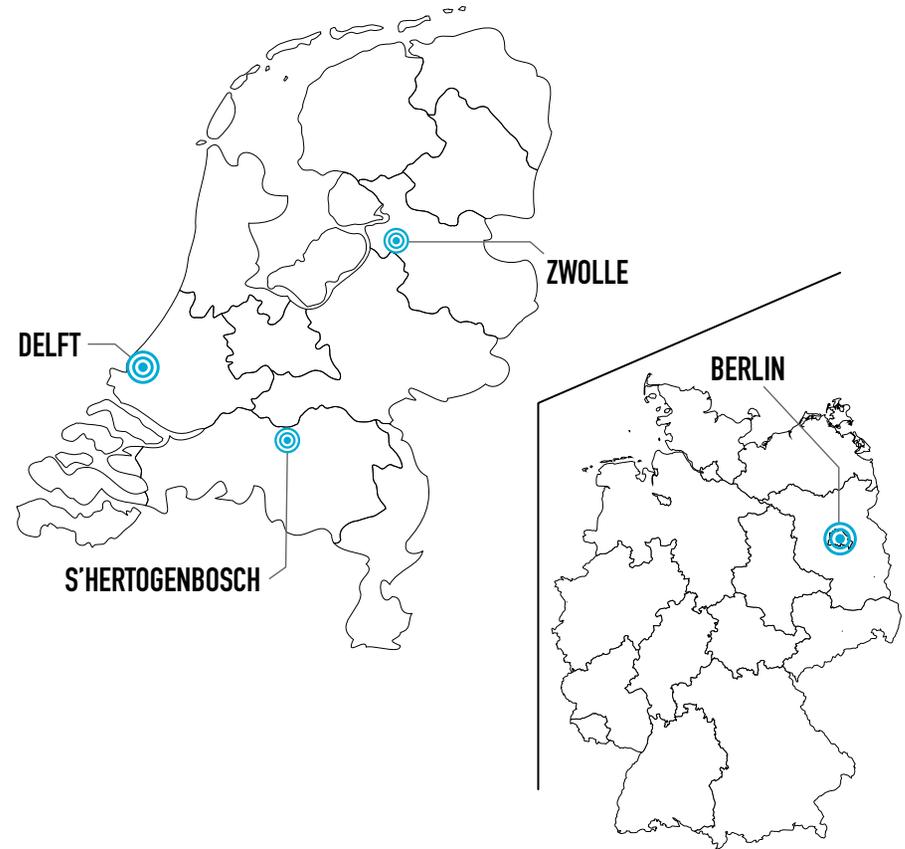
signing of our Memorandum of Understanding, Mobycon CEO Johan Diepens, Manager of International Strategy Lennart Nout, and Fergus McCarthy from SMM, were hosted by Julie Heckscher, the Head of Mission from the Australian Embassy in the Netherlands in The Hague.

The goal of this joint venture is to provide capacity building programs, design services, and products related to street design and active mobility projects. The collaboration between SMM and Mobycon is expected to support local governments in Australia to develop innovative and high-quality street designs in a complex urban mobility environment.

NORTH AMERICA
Canada & USA

**WORKING GLOBALLY TO INSPIRE SUSTAINABLE
MOBILITY SOLUTIONS**

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