

CASE STUDY

# Improving health and wellbeing through active mobility in the Caribbean region



#### **Basic information**

WHO Region AMRO

**City or Country** Bonaire, Netherlands (Kingdom of the)

Timeline 2024-2028 (ongoing)

**Type of intervention** Policy; research

**Primary level of** City

implementation

**Primary sectors involved** Transport; health; urban planning

**Primary health outcomes** Physical activity; traffic injury risk; air pollution

**or challenges** exposure; NCDs

## **Case description**

The island of Bonaire, a special municipality of the Kingdom of the Netherlands, faces a convergence of challenges common to many small island developing contexts: high prevalence of non-communicable diseases, widespread car dependency, and rising environmental pressures. Despite its compact settlement pattern and year-round favourable climate, rates of active mobility remain low, with evidence of gender and socio-economic inequities in physical activity. Recognizing the associated burden on public health and household economies, the Government of the Netherlands in 2024 launched a four-year initiative to develop an evidence-based policy for active mobility on Bonaire in collaboration with the Urban Cycling Institute, a non-profit research organization based in Amsterdam.

The project is designed as an action-research partnership, combining local participation with scientific rigor. It is funded and supported by the Ministry of Health, Welfare and Sport of the Kingdom of the Netherlands, with engagement from Bonaire's public health department, municipal actors such as Baislife Bonaire, and citizens representing diverse linguistic and ethnic groups. The effort aligns with the WHO Global Action Plan on Physical Activity and the Sustainable Development Goals, but its core methodology is deeply contextual – grounded in the island's unique social and cultural fabric.

During the first year of the project, researchers applied a mixed-methods approach to generate a baseline understanding of mobility patterns and perceptions. This included cross-sectional surveys, systematic observations using the Method for Observing Physical Activity and Wellbeing (MOHAWk) tool, stakeholder interviews and workshops,



and GIS analysis of travel flows and infrastructure. Findings showed very low levels of walking and cycling for daily transport, limited cycling infrastructure, and distinct social inequities: non-white residents tend to walk or cycle more frequently across all parts of the island. While car ownership has risen by more than 6000 per cent since the 1950s, street design and policy have not evolved to support sustainable modes. These data confirmed that behavioural, institutional and structural barriers reinforce a car-oriented system.

The research also identified critical opportunities. There is a vibrant recreational cycling community, monthly open-street events that can serve as living laboratories, and a high degree of interest among youth and schools for safe active mobility. Based on these findings, a multi-stakeholder steering committee was established to coordinate policy development and ensure alignment with local needs. The project team has committed to conducting annual data collection cycles to track changes and feed results back into decision-making.

Political and institutional barriers include limited local capacity for urban planning and data management, frequent administrative turnover, and cultural norms that associate car use with social status. However, enabling factors are strong: national-level policy support, active community partnerships, and a research model explicitly designed for learning and adaptation. By training citizen researchers and offering materials in four languages (Dutch, Papiamentu, English and Spanish), the project builds local capacity and equity into the research process itself. This approach is expected to yield evidence-based policy recommendations for Bonaire and potentially other Caribbean territories by 2028.

In sum, the Bonaire active mobility initiative is forging a new path for how evidence is generated and used for urban health policy in small island contexts. It treats research not as an academic exercise but as a collective vehicle for change – a foundation for more resilient, equitable and health-promoting urban environments.

## Strategic Highlight

This case highlights the strategic role that action research can serve in urban health. Rather than delivering a pre-designed intervention, the project embeds research within policy development, producing evidence tailored to decision needs and enabling continuous learning and adaptation.

In Bonaire, the Urban Cycling Institute and partners have initiated a cycle of knowledge generation that feeds directly into governance processes. Through participatory data collection, iterative evaluation, and citizen researcher training, the project builds the informational and institutional capacity necessary for strategic action. The academic

findings are translated into actionable policy insights, while expanding ownership of urban health objectives across sectors.

The initiative also demonstrates how strategic thinking can be anchored in local complexity. Its framework explicitly recognizes multiple determinants of health – such as transport and environment, culture and equity – and adapts the research design to Bonaire's multilingual, multi-ethnic context. By co-producing knowledge with communities and administrators, it avoids the fragmented silos that commonly impede policy coherence in small jurisdictions. The result is evidence that is scientifically robust and politically usable.

For decision-makers elsewhere, the Bonaire project underscores that strategic urban health action can begin with a focused effort – and then later progress to comprehensive strategy. In particular, it can emerge through a well-structured learning process that links stakeholders, identifies entry points for policy integration, and tests innovations in real settings. This type of embedded research helps governments build adaptive systems capable of responding to complex urban health challenges while strengthening trust and collaboration across sectors.

### **Further Information**

- Enhancing active mobility on Bonaire
- How to "De-Dutch" the bicycle: Development of active mobility policy on the Caribbean island of Bonaire through real-world mixed methods research
- Method for Observing pHysical Activity and Wellbeing (MOHAWk): validation of an observation tool to assess physical activity and other wellbeing behaviours in urban spaces