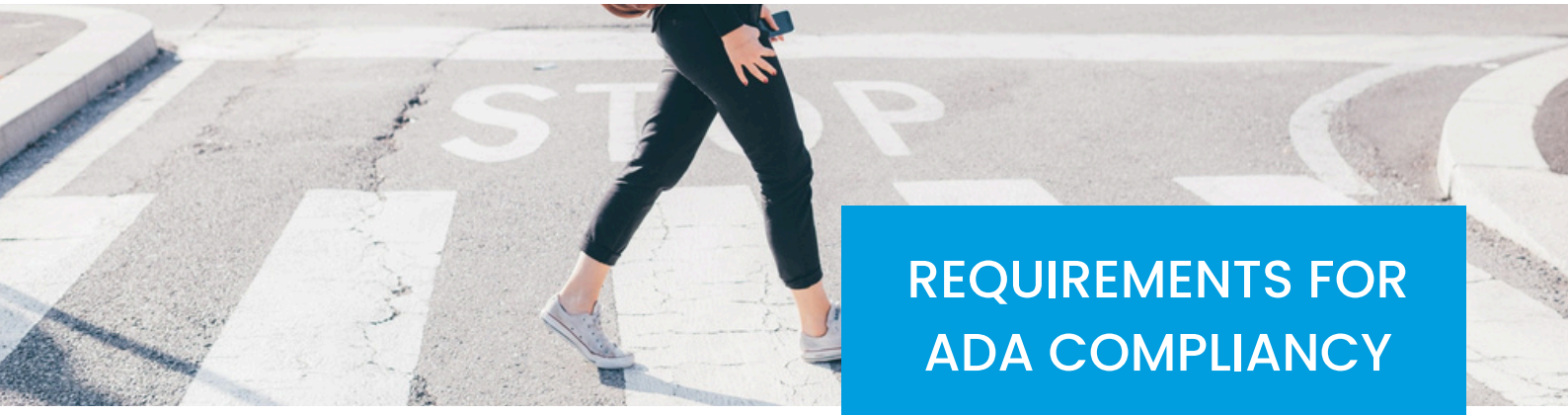
XenomatiX True solid state lidar Exact your exact solution

# SIDEWALK INSPECTION

## Inspect Sidewalks for ADA Compliance




### Setting New Standards for Safe Sidewalk Inspection

**XenomatiX cutting-edge lidar technology performs thorough and insightful sidewalk inspections.**
By identifying defects and potential hazards on the pavement, our innovative approach assigns a quality rating to each sidewalk, along with recommendations for essential repair methods in accordance to the Americans Disability Acts.



### REQUIREMENTS FOR ADA COMPLIANCY

XenomatiX sidewalk inspection helps evaluating the condition of the pavement in accordance to the ADA requirements:

Width: at least 36 inches wide

Slope: cannot exceed a 1:20 ratio

Texture: firm and stable

Ramp: mandatory

Hazards: potholes and uneven surfaces are considered trip hazards and need to be addressed.



# Digitizing sidewalk' pavement with XenoBike

## What is XenoBIKE

XenoBike is a turnkey solution for state-of-the-art pavement inspection, based on the innovative road lidar system, XenoTrack. This laser-based technology scans any narrow lane in great detail, revealing all possible defects and dangers. The obtained digital model is analyzed to give the path a quality label but to also reveal the nature of defects and required repair methods in case of poor quality.

XenoBike is a complete solution equipped with the following:
XenoTrack, road **lidar** to digitally map the surface; a 12-megapixel **camera** to capture HR images; an RTK **GPS/IMU** for precise location data; and the **wheel encoder** for data reliability.
In addition, a **box** to securely store equipment; a **tablet** for a user-friendly interface, and **warning labels** for enhanced safety during rides.



**XenoTrack**
3D Lidar

**XenoCam**
2D Camera

**RTK GPS/ IMU**

**Wheelencoder**

**Box & Tablet**

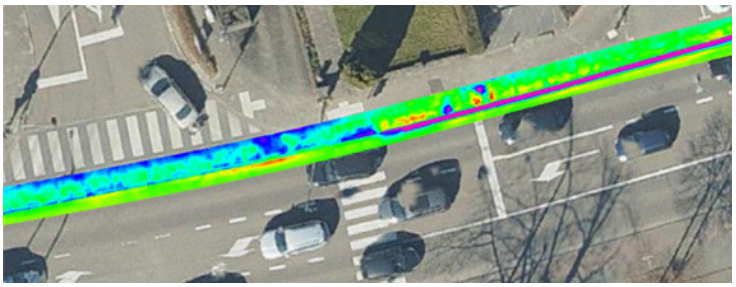
**Warning labels**

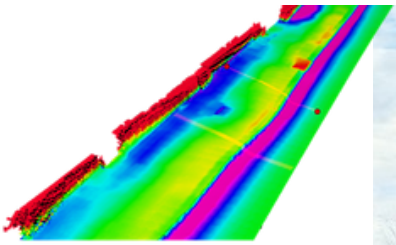
## XenoTrack

XenoTrack is a true-solid-state lidar. It provides high-resolution surface measurements that are millimeters accurate, detecting even the most superficial road distress, ensuring detailed safety-centric quality inspection.



# Benefits of analysing sidewalks with XenoBike









## XenoBike features

- Wide 86 cm, the vehicle can **measure any road lane** up to 4m wide.
- Collects data at variable speeds, including **start and stop**
- Powered by a battery, XenoBike enables **eco-friendly** and efficient data collection
- **No need for a driver's license.**
- Operates on **any pavement type**: asphalt, concrete, dirt roads, gravel, bricks, and more.
- **Automatic and rapid post-processing**, adhering to pre-defined quality metrics
- Accurate 6D model and 16+ objective characteristics
- Delivers a comprehensive digital pavement model encompassing 3D **geometry, markings, and 2D photos.**
- Provides **precise localization** in a world coordinate system.
- **Seamless integration** with your Project Management System (PMS) or Geographic Information System (GIS)

## Who is using XenoBike?

XenoBike is used among road authorities and surveyors **to conduct in-depth analyses of sidewalks and bike lanes.** In the hands of these professionals, XenoBike emerges as a key instrument, facilitating the meticulous examination and optimization of road infrastructure.

DeepWalk

### XenoBike benefits

*Cover more ground, faster and with less effort. Achieve an impressive **50 km per day** with the Xenobike – a huge leap from the typical 7 km/day achievable by humans.*

***Objective**, measurable **results***

*Well-documented, shareable data, making it **simple** to communicate with customer.*

# What do you get with XenoBike?

XenoBike offers a wealth of data, empowering you to conduct a thorough analysis of pavement conditions. Here are a few examples of the valuable insights you can extract:

3D HEIGHT MAPS Gain detailed insights through a 3D surface model and color-coded pavement model, revealing intricate geometry for comprehensive evaluation.

INTENSITY MAPS Utilize ortho-projected, gray-scale road images to uncover pavement markings and variations in material, providing essential details for a comprehensive assessment.

2D COLOR IMAGES Access high-resolution color pictures for visual checks, offering a clear and detailed view of the pavement condition.

IRI OR EC0.5 AND EC2.5 (Rutting and MDP) Quantify unevenness with precision, using indices such as IRI (International Roughness Index) or EC0.5 and EC2.5, serving as crucial measures for both comfort and safety evaluation.

CRACK, POTHOLE AND OBSTACLE DETECTION Identify the location, quantity, and severity of cracks, potholes and other obstacles providing insights crucial for strategic repair planning and ensuring a smoother, safer road for all users.

*Optional:*

PAVEMENT SLOPE Consider the longitudinal slope of pavement, an important factor for attractiveness and overall comfort during walking or cycling.

PAVEMENT WIDTH Evaluate the usable width of the lane, a critical safety measure ensuring optimal conditions for pedestrians or cyclists.

BANKING Assess the lateral slope of the sidewalk or bike lane, emphasizing its critical role in safety measures and ensuring a secure environment.

CONTACT US

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