



# Countculture



Oxford Street - Sydney  
Micro Mobility Monitoring

## CASE STUDY

[www.countculture.com](http://www.countculture.com)

# Countculture Sensors Aid City of Sydney Pedestrian Data Collection

Sydney has undergone substantial transformations over the past 15 years, making strides in pedestrianisation, cycle lanes, and public transport.

But, while there is plenty of anecdotal evidence of improvements in traffic flow and pedestrian and cycle safety, planners and businesses are sometimes limited by the lack of real-time data to support decisions.

Traditionally, manual counts have been conducted twice a year across numerous locations, providing only snapshots rather than continuous data. So, to address this limitation, the Sydney City transport team sought to explore the potential of AI-enabled pedestrian sensors in key locations to offer a more granular and continuous understanding of pedestrian activity and the use of micro-mobility across the city.



## The Oxford Street Project

Oxford Street was chosen for a trial deployment of Countculture sensors, leveraging existing relationships with the local business community and timed to coincide with extensive changes to the road, pedestrian, and cycling infrastructure in the area.

The trial tested a new partnership model, installing sensors under awnings using businesses' own power supplies. This approach was simpler and more cost-effective compared to mounting cameras on smart poles, which required additional power circuits and complex approvals.

While the key aim of the trial was to understand pedestrian flow on Oxford St throughout the day, another aspect of the trial was use of Countculture's advanced AI analytics, which can identify small vehicles such as share bikes and cargo bikes riding on footpaths.

In recent years, there's been a significant increase in share-bike and delivery-rider companies operating in Sydney, leading to issues of poor cycling behaviour on footpaths and people feeling unsafe or crowded.

The Sydney team worked with Countculture to trial the sensors' capability to count and classify different vehicle uses on the footpaths and report near misses between micro-mobility devices and pedestrians.

Historically, there hasn't been any way to access data around this issue, and understanding how it evolves is crucial, especially since share bikes have increased tenfold, from about 400 to about 4,000 in the last 18 months.

The Countculture sensor data allows the team to ask important questions about the riders and their behaviours. Sensor data will be able to reveal whether the number of people riding on the footpath tracks with the increased availability of share-bikes, for example.

Understanding these patterns can help address the issues more effectively, such as whether installing a cycleway would solve the problem or if people would still ride on the footpaths out of habit.

Additionally, the data provides insights into the night time economy, an area previously difficult to quantify. Understanding these patterns is vital for urban planning to ensure the city remains vibrant and accessible.



## Summary

The broader implications of automated systems for urban planning are significant. Continuous data collection provides a more accurate picture of how infrastructure changes impact pedestrian and cyclist behaviour. This data also supports efforts to address community concerns when planning future projects.

Sydney's shift to automated pedestrian counting systems represents a significant advancement in urban mobility planning. By leveraging technology and partnerships, the city can obtain continuous, granular data that informs infrastructure projects, supports community needs, and enhances the overall urban environment.

