

# COUNT ME IN

## PEDESTRIAN COUNTERS

### CASE STUDY



#### ABOUT THIS CASE STUDY:

Getting hold of good data on the number of pedestrians is invaluable to plan and prioritise walking-friendly streets. This case study explains why it's important to count pedestrians, and how to go about doing it using automatic pedestrian counters.



# IF YOU DON'T COUNT IT, IT DOESN'T COUNT

In contrast to the amount of data about vehicle traffic, there's often surprisingly little data around on the number of pedestrians. But counting pedestrians is vital:

## TO JUSTIFY CHANGE

Reliable data on the number of pedestrians helps to make the case for investment in our pavements, footpaths, town centres and pedestrianised areas.

## TO PLAN

Counters provide a better understanding of where and when people walk, for example by identifying the most popular routes or busiest times of the week. This helps to prioritise investment and design effective improvement projects.

## TO DEMONSTRATE IMPACT

Before and after counts demonstrate the impact of improvement measures and pilot projects.

## TO COMMUNICATE

Detailed, reliable data on the number of pedestrians helps to communicate the number and importance of pedestrians to politicians, planners and funders.

Stephen Thomas, Technical Clerk,  
Moray Council

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**“WHEN YOU ARE SPENDING LARGE AMOUNTS OF MONEY YOU NEED DATA TO JUSTIFY THE SPEND. IT'S WORTH THE TIME AND EFFORT. THE DATA HELPS US TO DEMONSTRATE THE IMPACT OF PREVIOUS SCHEMES AND GET FUNDING FOR OTHER SCHEME IMPROVEMENTS.”**



# GETTING STARTED



The most basic way to count pedestrians is to manually count the number of people walking past a particular spot. However, manual counts can be inaccurate and time-consuming, and only provide data for a snapshot in time.

A more effective option is to use automatic pedestrian counters, which can collect data over 24 hours, for days, weeks, months or years at a time. As well as providing valuable data on the total number of people, counters can also show how the number of pedestrians changes from season to season, from weekends to workdays, at different times of the day and in good and bad weather.

## WHAT ARE AUTOMATIC PEDESTRIAN COUNTERS?

Pedestrian counters automatically count the number of people in a particular location. They are usually tough, low maintenance and built to withstand all weather conditions. They tend to be very discreet, so most people passing by won't even notice they're there.

## WHO USES THEM?

In Scotland, typical users include local authorities, amenity organisations such as the Forestry Commission and the National Trust, and commercial or shopping districts.

Planning a data collection programme and analysing the results requires specialist knowledge. However, with the support of organisations such as Living Streets Scotland, local volunteer-led community groups can also use pedestrian counters successfully.

## WHERE ARE THEY USED?

Pedestrian counters are used in town centres, on footways, footpaths and trails, and at visitor attractions and parks.

They are typically mounted to the side(s) or above a path or walkway, to count the number of people walking past. The exact choice of location is important to ensure that the counters don't under or over count the number of people.

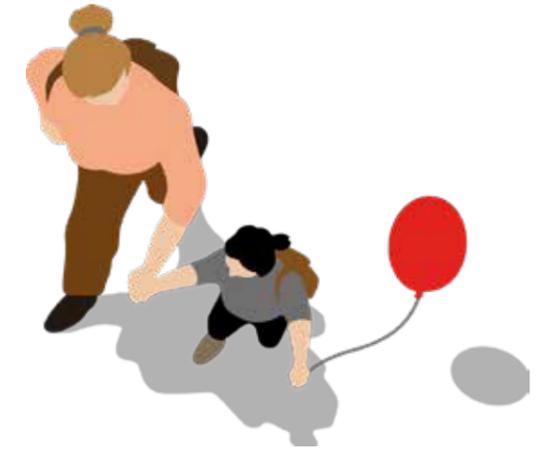
## WHAT TYPES OF COUNTER ARE AVAILABLE?

A number of different technologies are available, such as infrared, radio beam or automated video. Each technology has its own strengths and limitations, which will determine where best to use it. Considerations include cost, mobility, ease of use and accuracy. Some counters only count pedestrians, whilst others also count bicycles, vehicles and even horses.

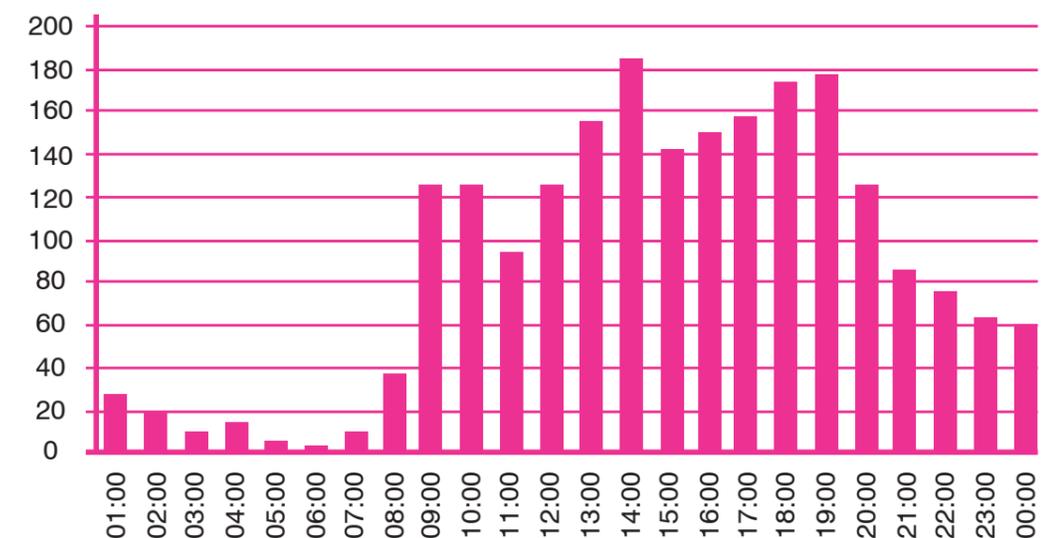
Both mobile and fixed counters are available. Mobile counters are temporarily mounted to existing infrastructure such as railings. They can be particularly useful and cost-effective for gathering short-duration counts (typically less than one to several days) at many different locations. Fixed counters provide continuous data over a longer time period (typically multiple years), at a smaller sample of locations.

## HOW MUCH DO THEY COST?

Pedestrian counters vary in price depending on their complexity. Basic models generally start at around £1,000, whilst more complex counters can cost upwards of £3,000.



DAILY AVERAGE PEDESTRIAN PASSES (PER HOUR)



Example data taken from Buccleuch Strret

# THE POWER OF GOOD DATA

## MORAY COUNCIL

Moray Council makes extensive use of counters to justify spending and demonstrate the impact of new walking and cycling infrastructure.

The Council takes before and after counts of the number of pedestrians and cyclists to examine the impacts of new footpaths, cycle ways and pedestrian crossings.

Moray usually uses fixed counters to collect data on the number of pedestrians and cyclists. They sometimes supplement the automatic counters with data from time-lapse cameras, particularly when collecting baseline data before making any improvements, or in locations where it is difficult to install automatic counters. Some of Moray's counters have been installed for several years, providing invaluable data on consistent, long-term changes in pedestrian numbers.

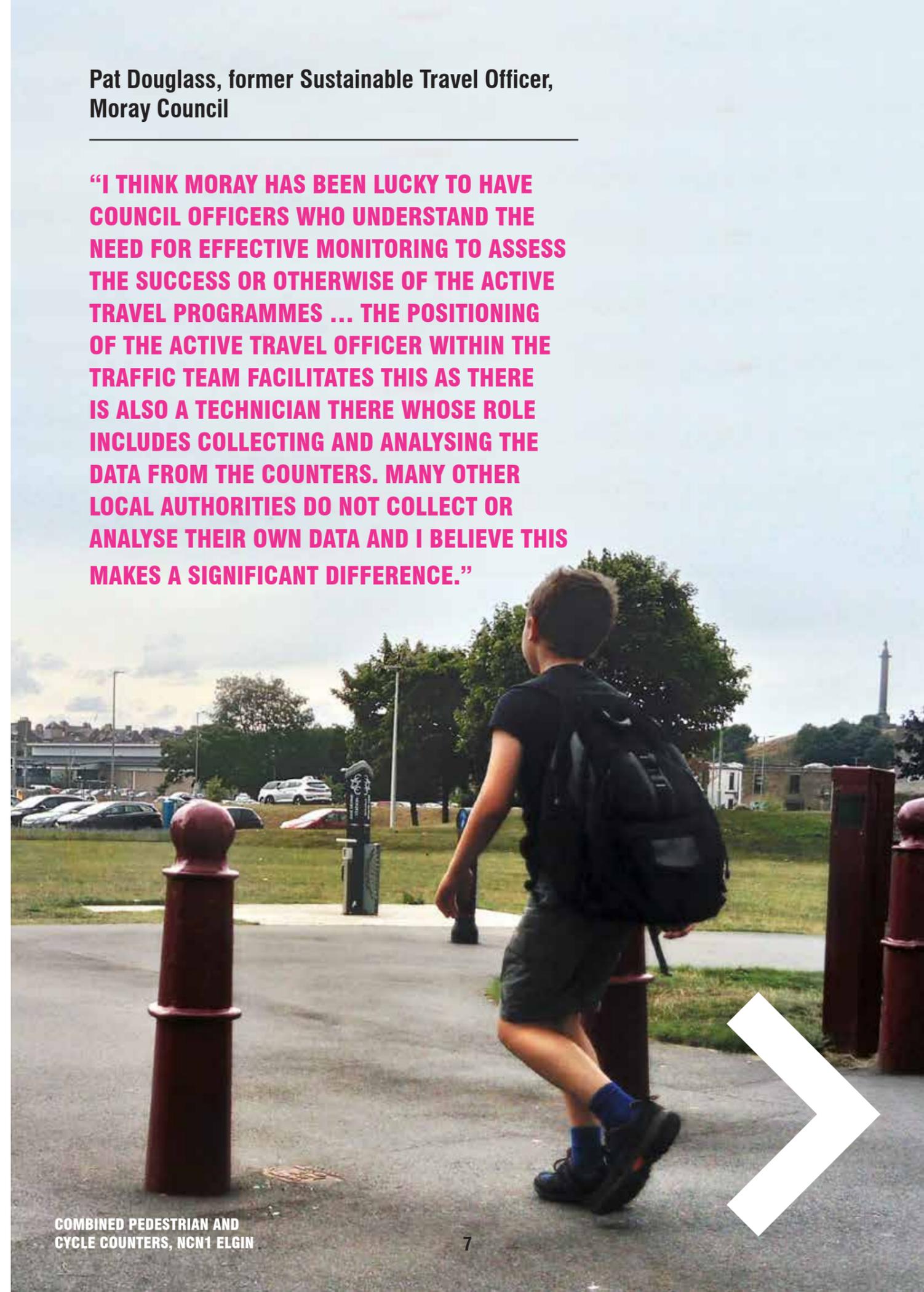
Count data is used to show the impact of funding, to justify Council investment in new walking and cycling routes, to support funding bids and to justify ongoing maintenance in routes.

For example, when the Council constructed a new path along the River Lossie in Elgin, they counted the number of people using the route before and after. The results showed how popular the new path was. This persuaded the councillors to invest in more improvements to other nearby walking and cycling routes, all as part of the Elgin Transport Strategy.



Pat Douglass, former Sustainable Travel Officer,  
Moray Council

**“I THINK MORAY HAS BEEN LUCKY TO HAVE COUNCIL OFFICERS WHO UNDERSTAND THE NEED FOR EFFECTIVE MONITORING TO ASSESS THE SUCCESS OR OTHERWISE OF THE ACTIVE TRAVEL PROGRAMMES ... THE POSITIONING OF THE ACTIVE TRAVEL OFFICER WITHIN THE TRAFFIC TEAM FACILITATES THIS AS THERE IS ALSO A TECHNICIAN THERE WHOSE ROLE INCLUDES COLLECTING AND ANALYSING THE DATA FROM THE COUNTERS. MANY OTHER LOCAL AUTHORITIES DO NOT COLLECT OR ANALYSE THEIR OWN DATA AND I BELIEVE THIS MAKES A SIGNIFICANT DIFFERENCE.”**



## DEAN VALLEY REGENERATION PROJECT

The Dean Valley Regeneration project has used pedestrian counters to show how immensely popular the Dean Valley is, helping to make their case for funding.

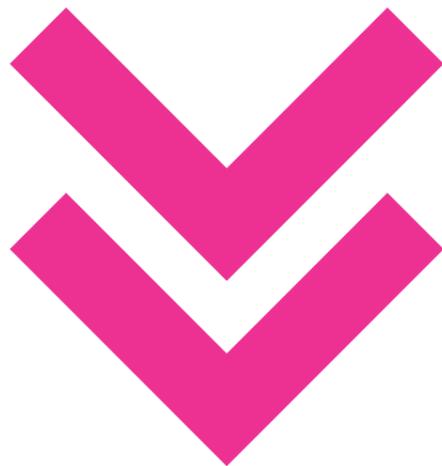
The Dean Valley Regeneration project is a not-for-profit restoration initiative, made up of volunteers from the community seeking to breathe new life into one of Scotland's most important and beautiful historic landscapes – the Dean Valley in Edinburgh's New Town.

In partnership with Living Streets Scotland, the Dean Valley Regeneration project installed mobile, automatic counters along one of the popular walkways in the Valley, to find out exactly how many people were using it for five selected weeks over the year.

The results showed that in August at the height of summer, over 11,000 people were using the walkway over a seven day period. Even in cold, dark December, over 500 people a day continued using the path. The data also showed how the pattern of use changed over time. For example, Sundays were consistently the most popular day of the week.

The volunteers are now supplementing numeric data from the counters with questionnaire surveys of walkers, cyclists and residents. The questionnaire results will help to paint the bigger picture of why people use the Valley, their thoughts about it, and what improvement works they might like to see.

Dean Valley Regeneration project has used the pedestrian count data in discussions with the Council and grant funders, to help make their case for investment. They have found it invaluable to have scientific data to prove how popular the Valley is. The detailed data on when people are using the walkways will also help to plan and prioritise improvement works.



Kristina Taylor, volunteer, Dean Valley Regeneration Ltd

**“THE DATA HAS BEEN REALLY USEFUL TO HELP JUSTIFY OUR LOBBYING FOR INVESTMENT IN THE DEAN VALLEY. IF YOU ARE GOING FOR GRANTS AND TRYING TO GET MONEY, YOU NEED TO HAVE PROPER DATA TO HELP MAKE YOUR CASE. IT’S VERY IMPORTANT FOR COUNCILS TO KNOW WHO’S GOING WHERE, SO THEY KNOW WHERE TO SPEND THEIR MONEY. THE DATA WE’VE COLLECTED HAS BEEN SUPERB.”**



## LIVING STREETS SCOTLAND AND CITY OF EDINBURGH COUNCIL

Edinburgh has used pedestrian counters to evaluate the impact of banning traffic from school streets.

The City of Edinburgh Council wants to create a safer, more pleasant environment around schools, to encourage more children to walk or cycle. To achieve this, they decided to close nearby streets to traffic at school drop-off and pick-up times.

The Council selected nine schools as pilot projects to test the impact of school street closures. The schools were chosen after reporting congestion and road safety issues.

In partnership with Living Streets Scotland, Council staff used mobile pedestrian counters to collect before and after data on the number of children walking to school. The counters were placed on the most popular routes to each school and left in place for seven days, to get a pattern of pedestrian use over the week.

Information from the automatic counters was supplemented by 'Travel Tracker', an online tool for pupils to log their daily journeys to school. The Council also collected data on traffic volumes and speeds, alongside feedback from residents and parents.

The findings showed that after the school street closures, the number of children walking to school went up. Parents, pupils and teachers said that they felt safer and more likely to walk. There was also a reduction in the number and speed of vehicles in the local area.

As a result, the school street closures have now become permanent in the nine pilot schools, and the project is being rolled out across more schools in Edinburgh.



**Stacey Monteith-Skelton,  
Senior Engineer (Road  
Safety), The City of  
Edinburgh Council**

**“IT’S DEFINITELY WORTHWHILE TO USE THE PEDESTRIAN COUNTERS. THE RESULTS SHOWED THAT THE NUMBER OF PEOPLE WALKING HAD GONE UP, AND WE’RE NOW ROLLING OUT MORE SCHOOL STREET CLOSURES ACROSS THE CITY.”**

# RECOMMENDATIONS

## START COUNTING

Start using pedestrian counters now to get an accurate baseline and monitor the impact of your work. Install counters on new walking routes as an integral part of new transport infrastructure, and add them to the existing route network to get an accurate picture of how many people walk where. Mobile counters can be a flexible solution to get your pedestrian data set up and running quickly.



## CHOOSE THE BEST TECHNOLOGY FOR YOU

Investigate the different kinds of pedestrian counters available and choose the best one for you.

## GET A COUNTING CHAMPION

Make sure that someone has responsibility for promoting and managing the use of your pedestrian counters. Your counting champion will understand the value of effective monitoring, and ensure that data is collected, analysed and used effectively.

## REPORT AND SHARE YOUR RESULTS

Set up a system of reporting data to local authorities, funding organisations and other interested organisations, to show the impact of good walking infrastructure and to justify spending. Also consider sharing data with Transport Scotland, to inform transport policy and statistics.





## FIND OUT MORE

Living Streets Scotland runs a range of programmes to help communities improve their walking environment: <https://www.livingstreets.org.uk/who-we-are/scotland>

Sustrans Scotland runs the Community Links programme, which provides grant funding for projects to improve walking and cycling infrastructure:  
<https://www.sustrans.org.uk/scotland>

PAS can provide advice, training and information on planning applications and the planning system: <https://www.pas.org.uk>

## CONTACT INFORMATION

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