

A Sustainable Mobility Index for Rural Towns in Ireland's Western Region

PART 2

The Indicators

This section provides the background details and results for the 30 indicators used in SMI 2022. Scores for the 35 towns are shown for each indicator.

Definitions used in this section

10k town A town with a population of more than 10,000 in the 2016 Census.
These are key services centres

50k City A city with a population of more than 50,000 in the 2016 Census.
These are the largest service centres

PT Public Transport

N/A Not applicable

Note: Unless otherwise stated the scores for the indicators were calculated by setting the maximum indicator at 10 and the minimum at zero after adjustment for outliers. The other scores are calculated relative to the range between these.

Active travel and public transport to secondary school

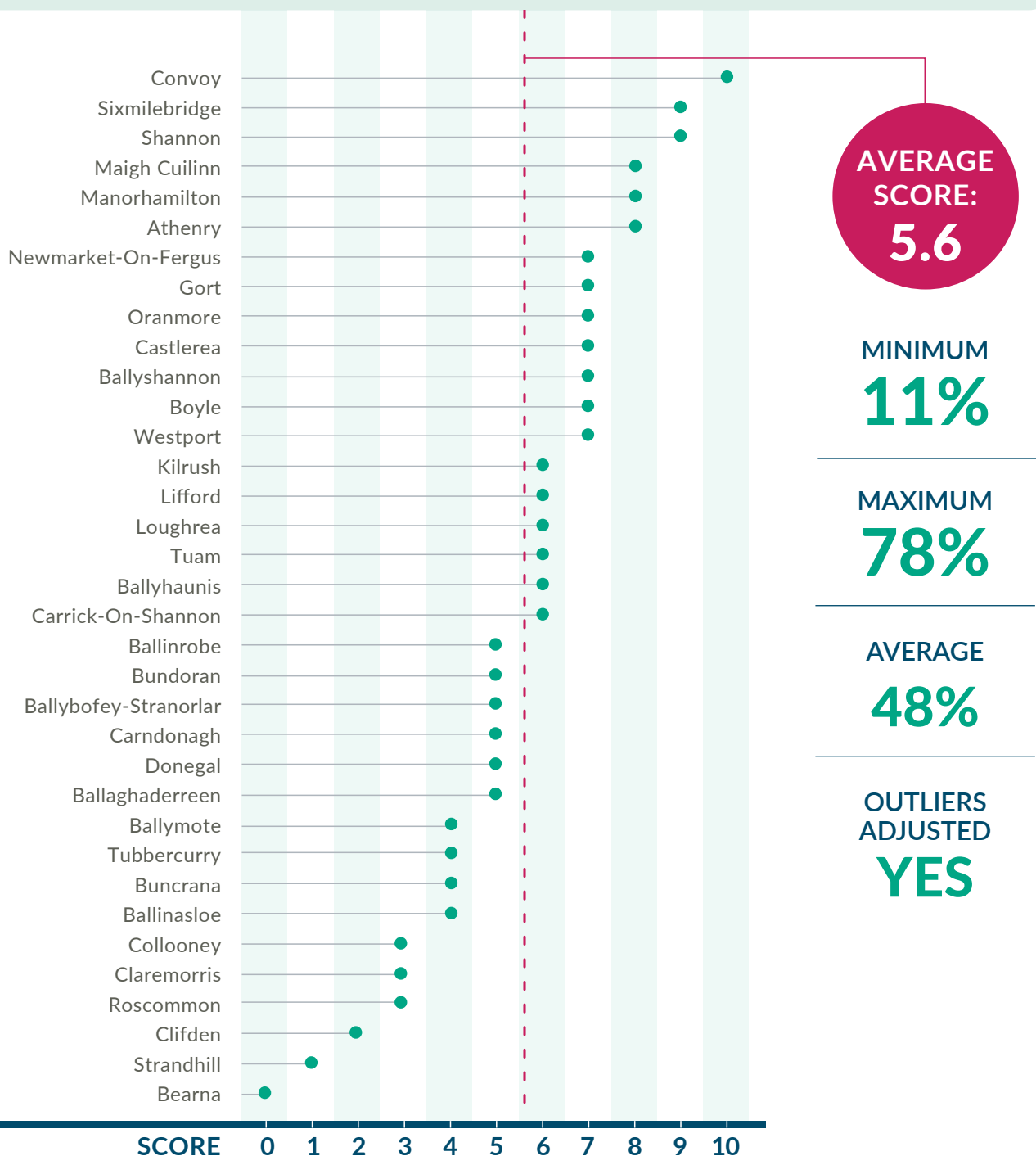
Definition: Combined mode share of public transport and active modes for second level education among residents of the CSO settlement. 'Not stated' excluded before calculating percentages

Source: Usual mode of travel, Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Indicator of levels of public transport and active travel use for commuting to secondary school. Shows use of public transport and active travel mode options for secondary education. Most, but not all, of the towns have a secondary school

Type: Low Carbon Transition Theme



Active travel and public transport to third level education

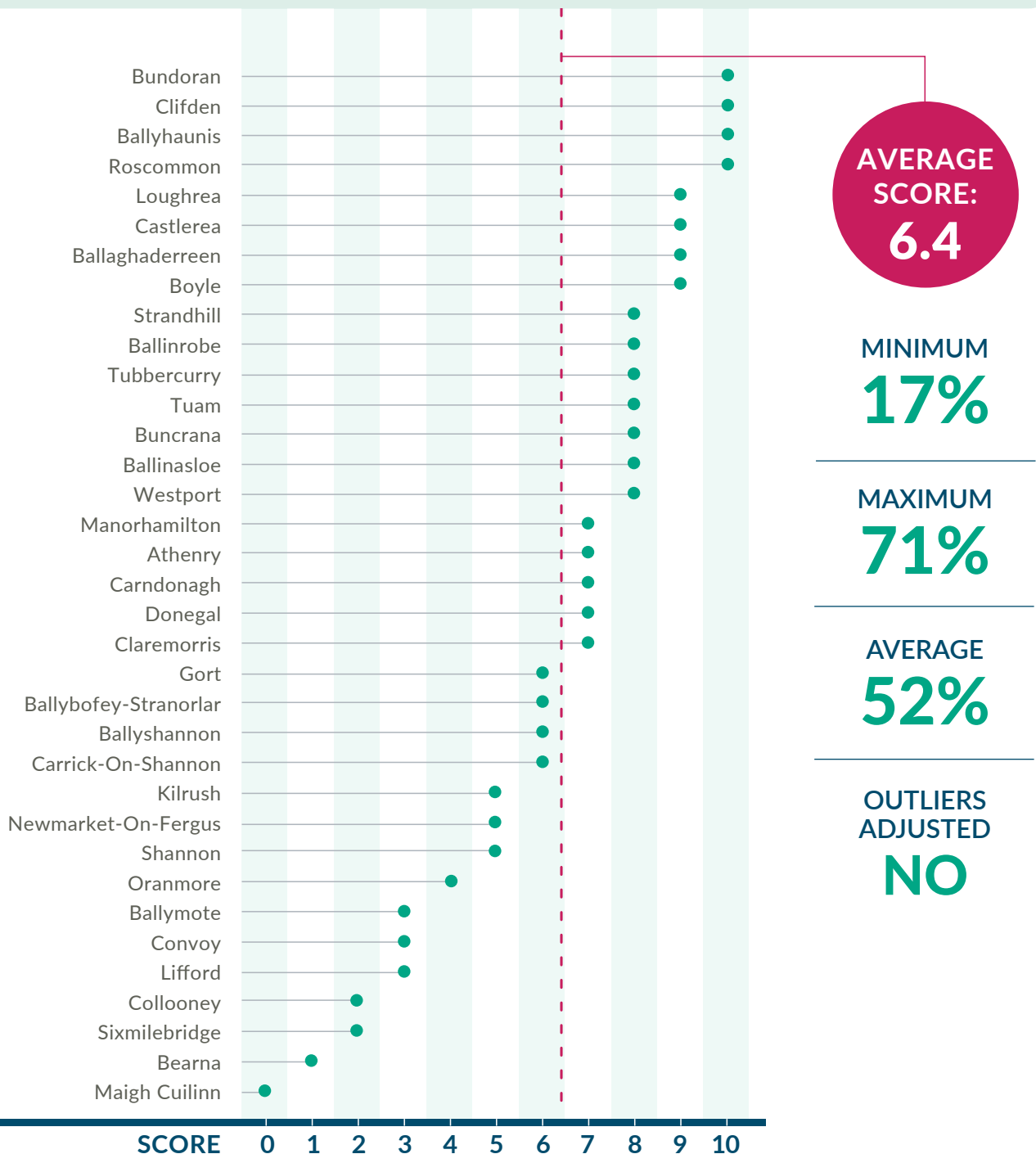
Definition: Combined mode share of public transport and active modes for third level education among residents of the CSO settlement. 'Not stated' excluded before calculating percentages

Source: Usual mode of travel, Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Shows use of public transport and active travel mode options for third level. This indicator focuses on third level which can be quite distant from many of the towns so active travel less likely but public transport is an important option

Type: Low Carbon Transition Theme



Lowest car ownership per household in town

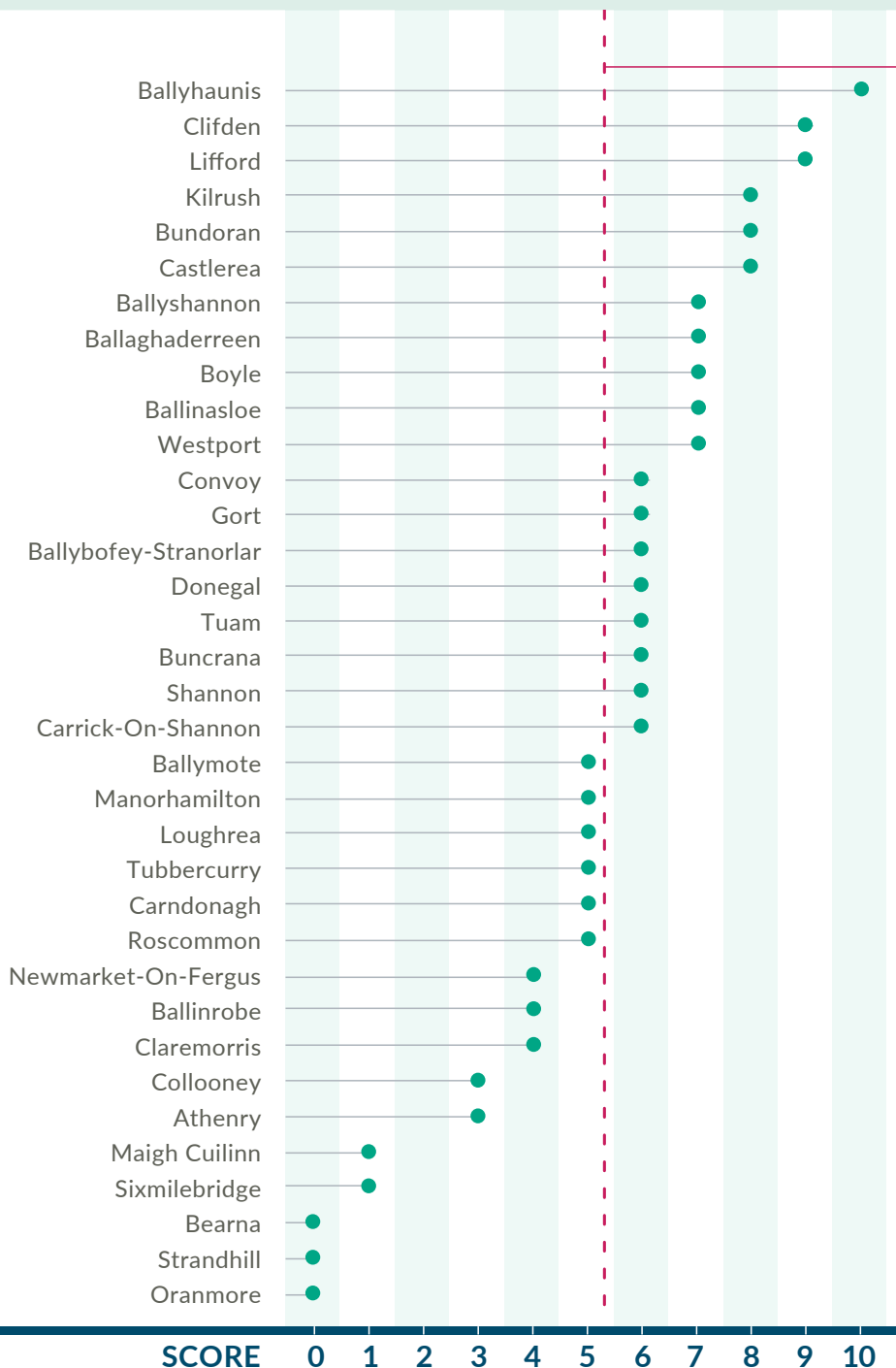
Definition: Inverse of the average number of cars per adult 18+ in the town. Assuming '4 or more' cars (in a household) is 4

Source: Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Measure of current situation and reliance on cars

Type: Low Carbon Transition Theme



AVERAGE SCORE: 5.3

LOWEST SCORING CARS TO POPULATION OVER 18 0.79

HIGHEST SCORING CARS TO POPULATION OVER 18 0.44

AVERAGE CARS TO POPULATION OVER 18 0.59

OUTLIERS ADJUSTED YES

Propensity to car share for work (car passenger/car driver ratio)

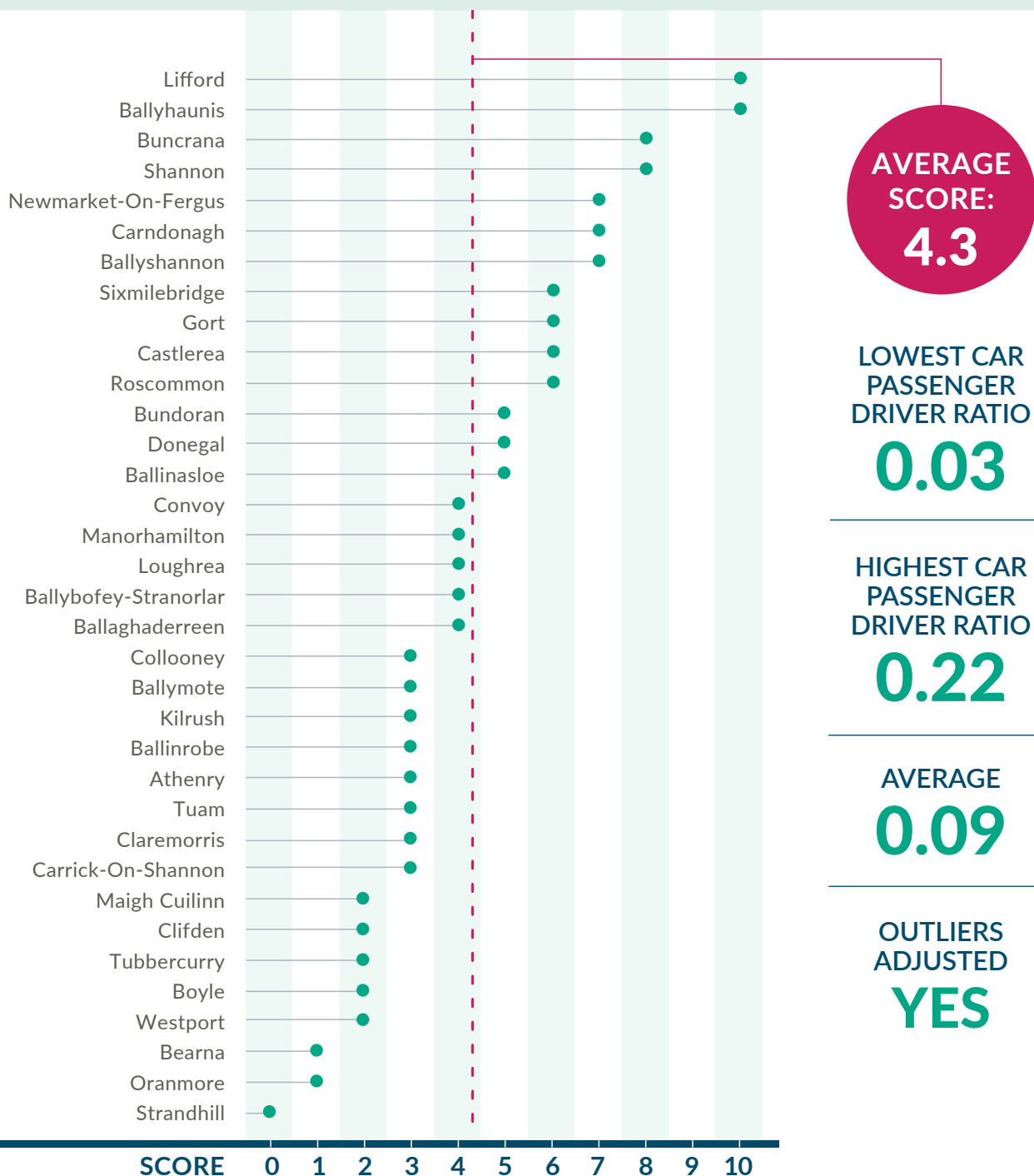
Definition: Propensity to car share for work (Car passenger / car driver ratio)

Source: Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Measure of current situation and reliance on cars. Good measure of mobility patterns in the town and potential for future behaviour changes

Type: Low Carbon Transition Theme



Availability of charging points for electric vehicles

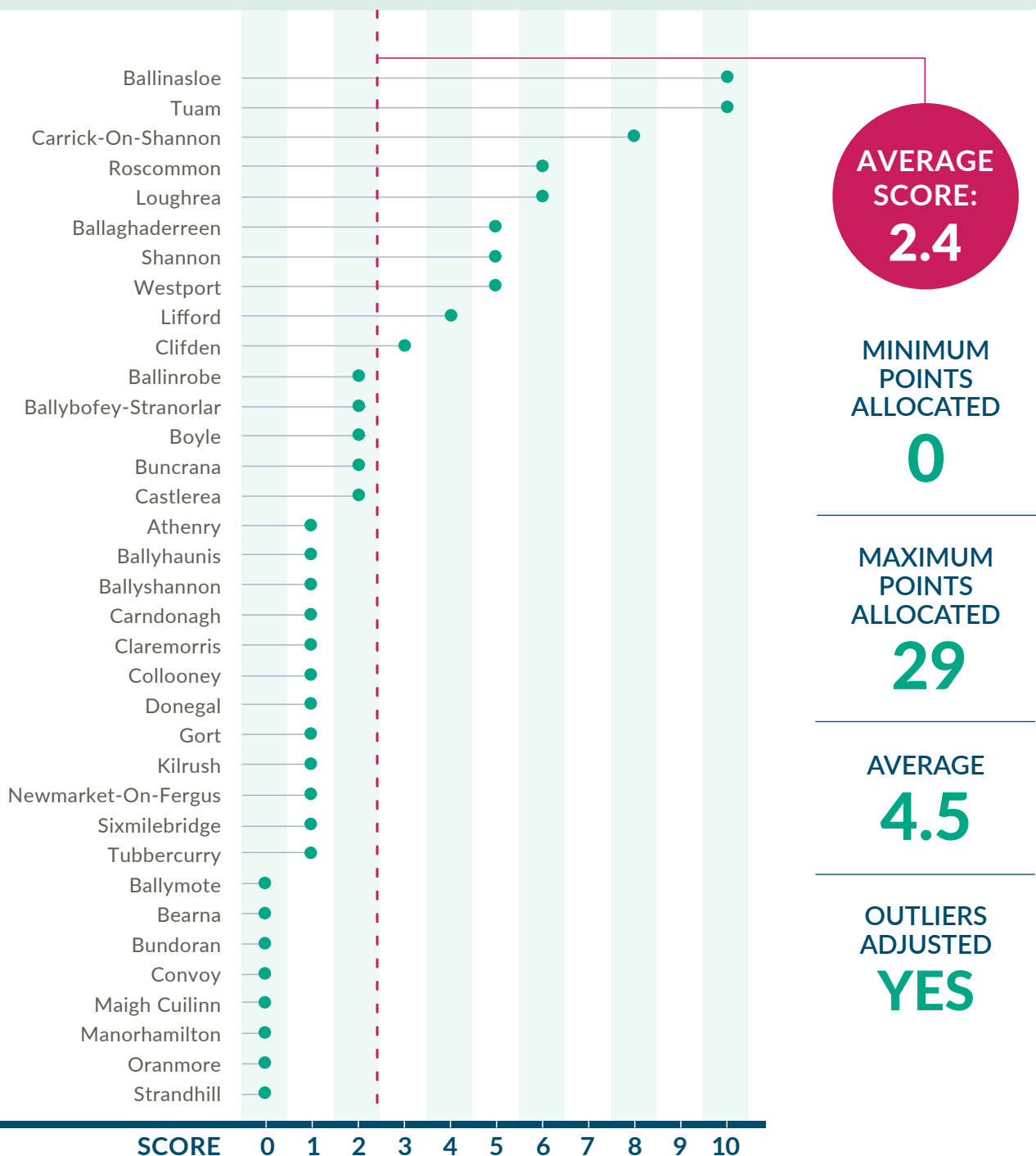
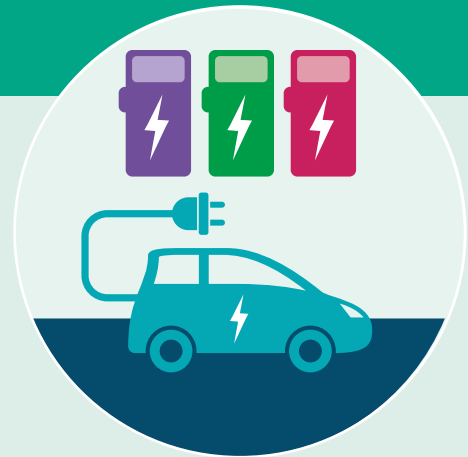
Definition: Availability of charging points for Electric Vehicles (EVs) in the town. Points allocated for Number and Type (before conversion to Index score): Standard (1 for each), Fast (2 for each), High Power (3 for each)

Source: ESB Charge point map⁷

Data collected: July 2022

What does it show? Important indicator of readiness for switch to EVs and to give confidence to those thinking of switching. While most charging will be done at home availability is essential as back up for those using the town (from surrounding areas, visiting for work or personal reasons or using services as well as for tourists)

Type: Low Carbon Transition Theme



⁷ Source: <https://esbecars.esb.ie/ecars/charge-point-map> 27.07.22 & 28.07.22

Transport plan and active town strategy

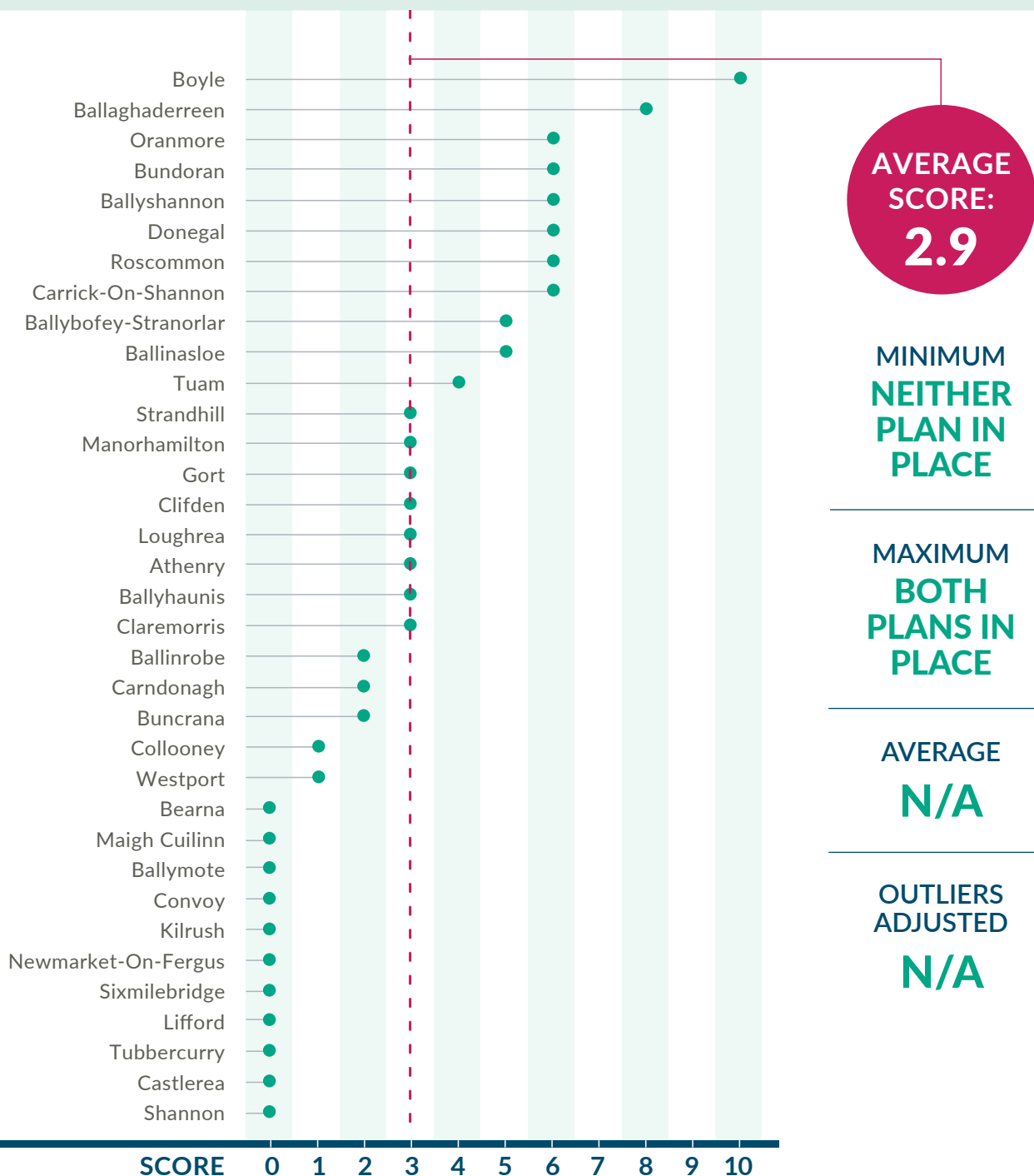
Definition: Is there a i) Transport/ mobility strategy for the town and ii) Active Travel strategy. Reply for was one of 4 options. Yes (5); One in development (3); One planned (1). This was done for each of the two options: max score 10 points.

Source: Information requested from Local Authority

Data collected: January 2022; confirmed October 2022

What does it show? Indication of consideration of mobility issues and a plan to be implemented

Type: Low Carbon Transition Theme



Cycle parking at rail stations/bus stops/ different locations across towns

Definition: Cycle parking spaces at rail stations or bus stops (5 points) and in other locations (5)

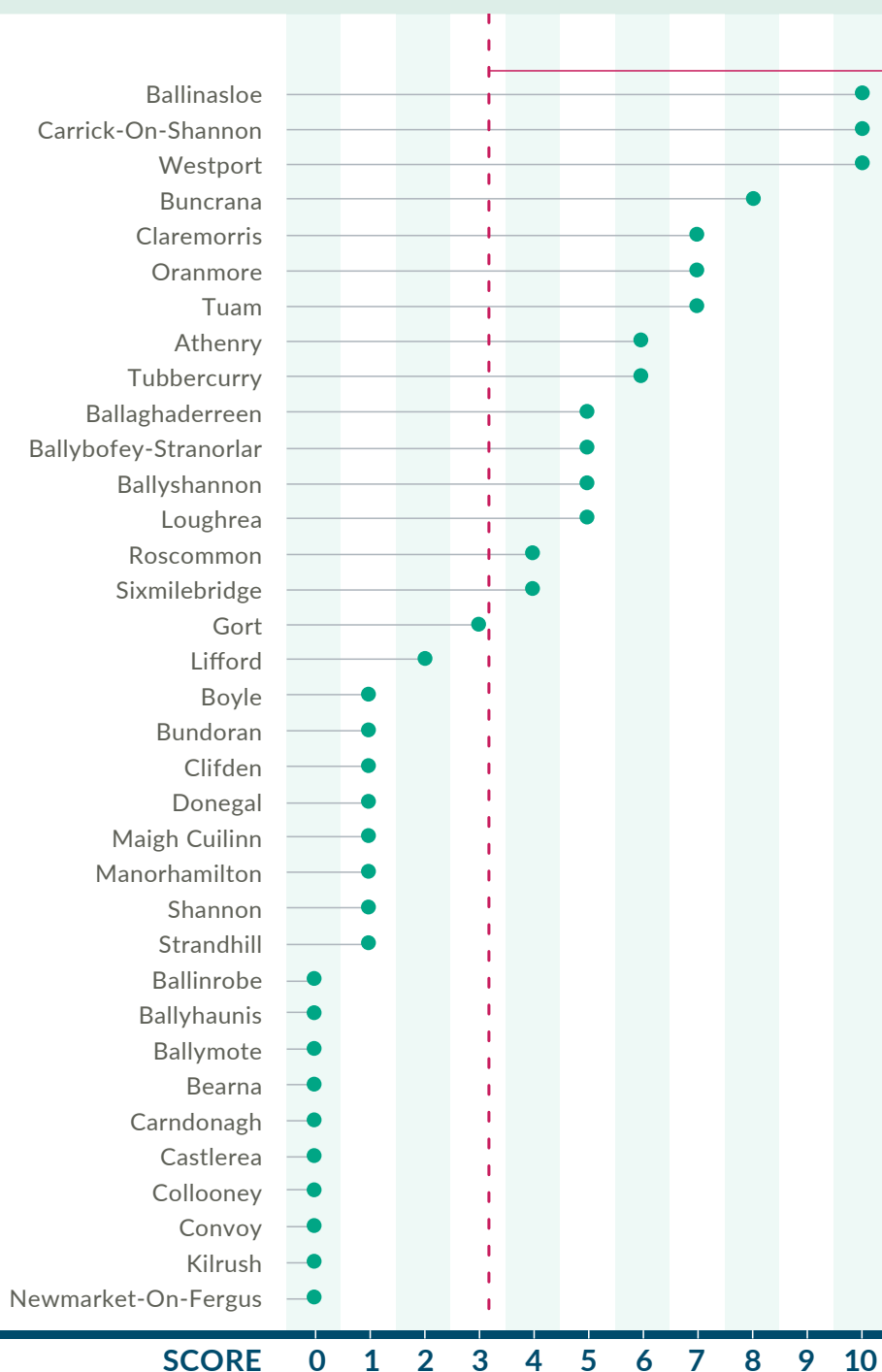
Measure 1 (max 5): Cycle parking at rail station or close to bus stop, Score None at either (0), Parking at only 1 of the 2, (2) Parking at bus if only bus, (4) Yes at both (5). Measure 2 (max 5, adjusted for population) Number of publicly provided cycle parking locations in town, None, (0); 1 place, (1); 2 places, (2); 3 places (3); 4 places (4); More than 5, (5).

Source: WDC survey

Data collected: June 2022

What does it show? Cycle parking is essential and there needs to be sufficient parking in a variety of places. Important option for public transport users and promotion of multimodal options. Measure of commitment to cycling and needs of cyclists

Type: Low Carbon Transition Theme



AVERAGE SCORE:
3.2

NUMBER OF ZEROS
10

NUMBER OF TENS
3

AVERAGE
N/A

OUTLIERS ADJUSTED
N/A

⁷ Source: <https://esbecars.esb.ie/ecars/charge-point-map> 27.07.22 & 28.07.22

Cycle paths/marked cycle lanes

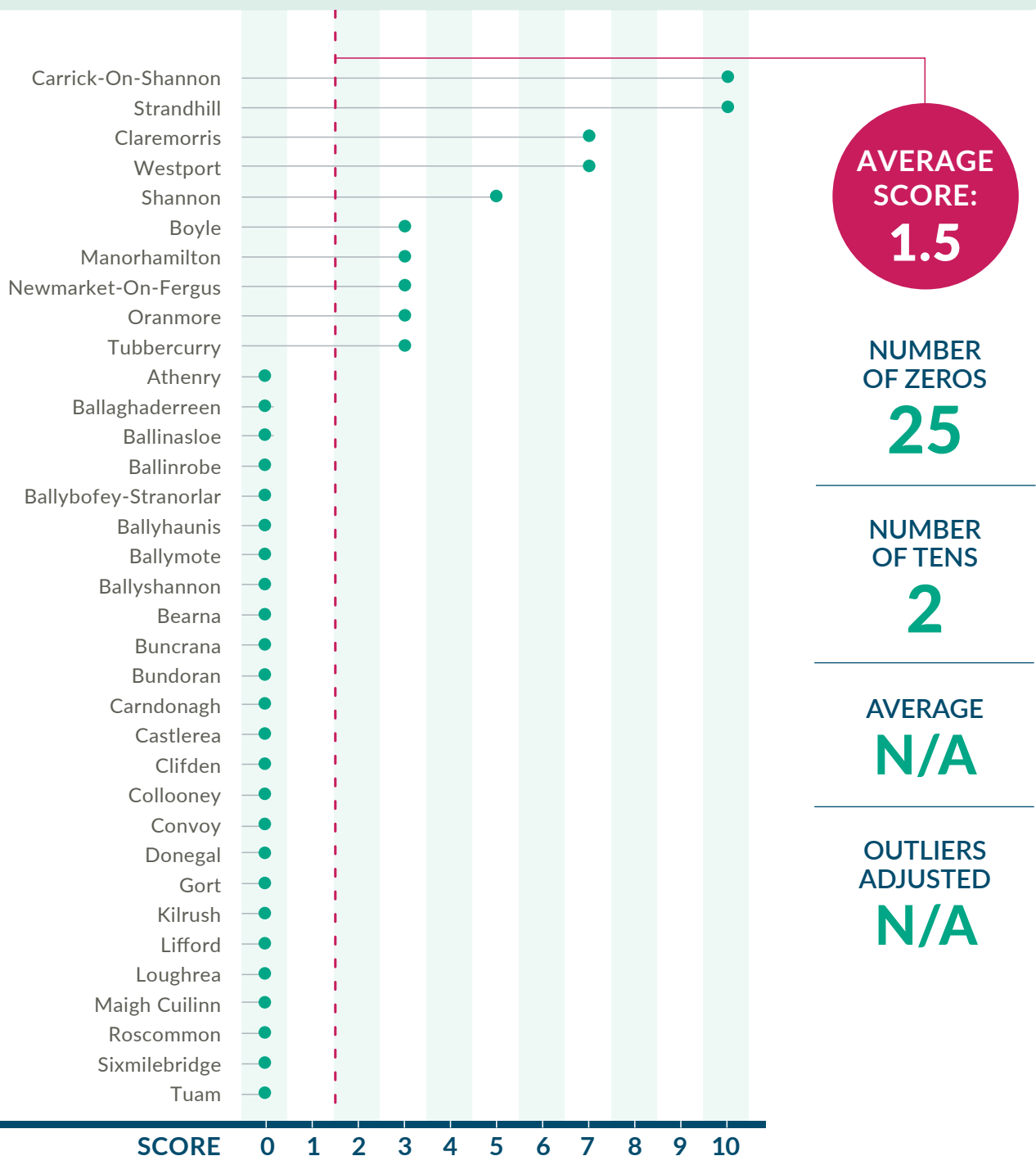
Definition: Cycle lanes in town, on road or separate from traffic (Score), No (0); Yes on 1 street/road (3); Yes on 2 streets/roads (5); Yes on 3 streets/roads, (7); Many cycle lanes on roads or separate from traffic (10)

Source: WDC Survey

Data collected: June 2022

What does it show? Shows if provision has been made for cyclists on town streets and roads. Cycle lanes tend to be associated with looking beyond cars for town mobility. Useful measure of integration of cycling

Type: Low Carbon Transition Theme



Public realm investment and pedestrianised zone

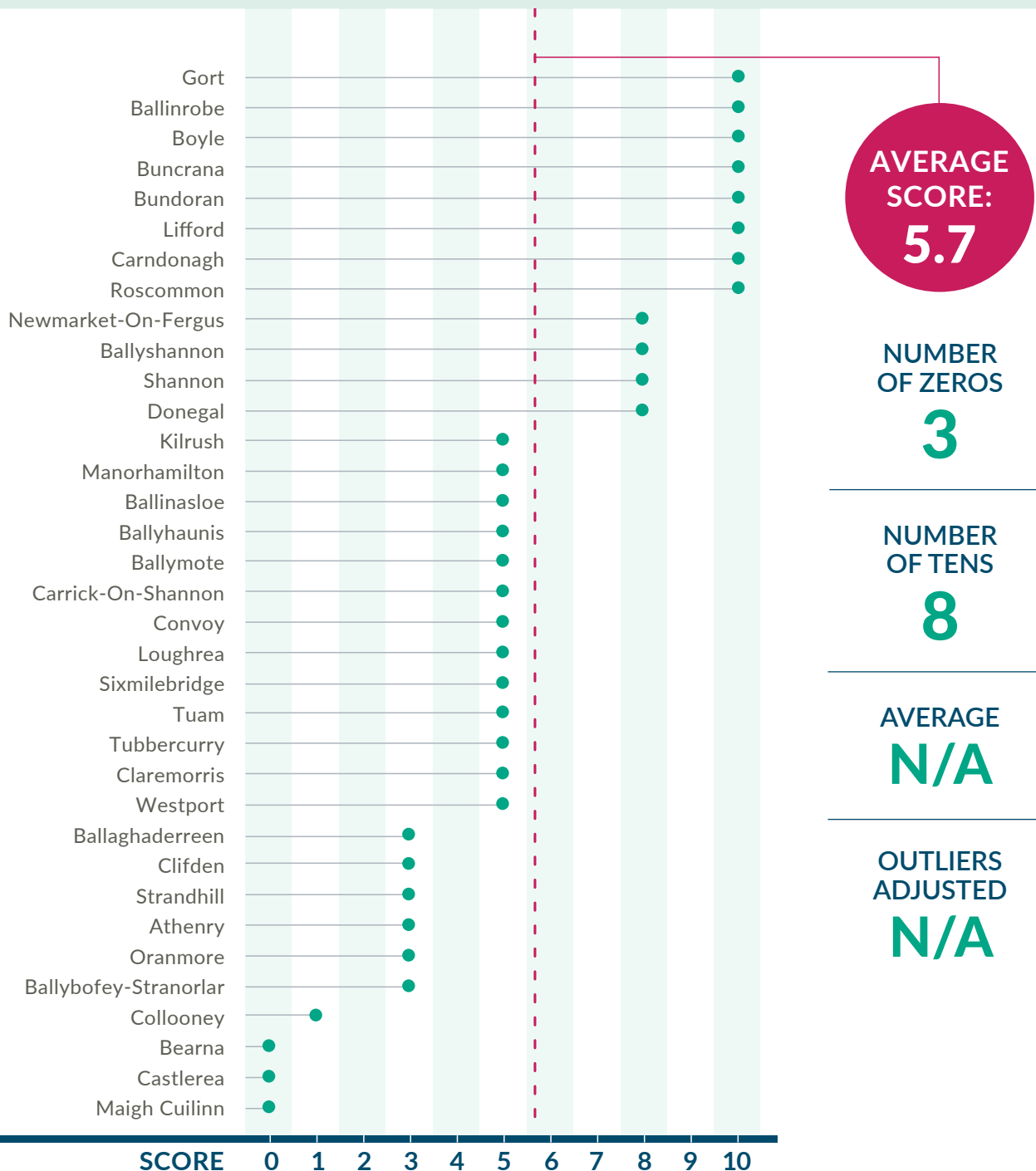
Definition: Public realm investment (5) and pedestrianised or vehicle restricted area in the town (5)

Source: Provided by Local Authority

Data collected: February 2022, confirmed October 2022

What does it show? Shows evidence of investment in the town which can make walking more pleasant

Type: Low Carbon Transition Theme



⁷ Source: <https://esbecars.esb.ie/ecars/charge-point-map> 27.07.22 & 28.07.22

Walkability

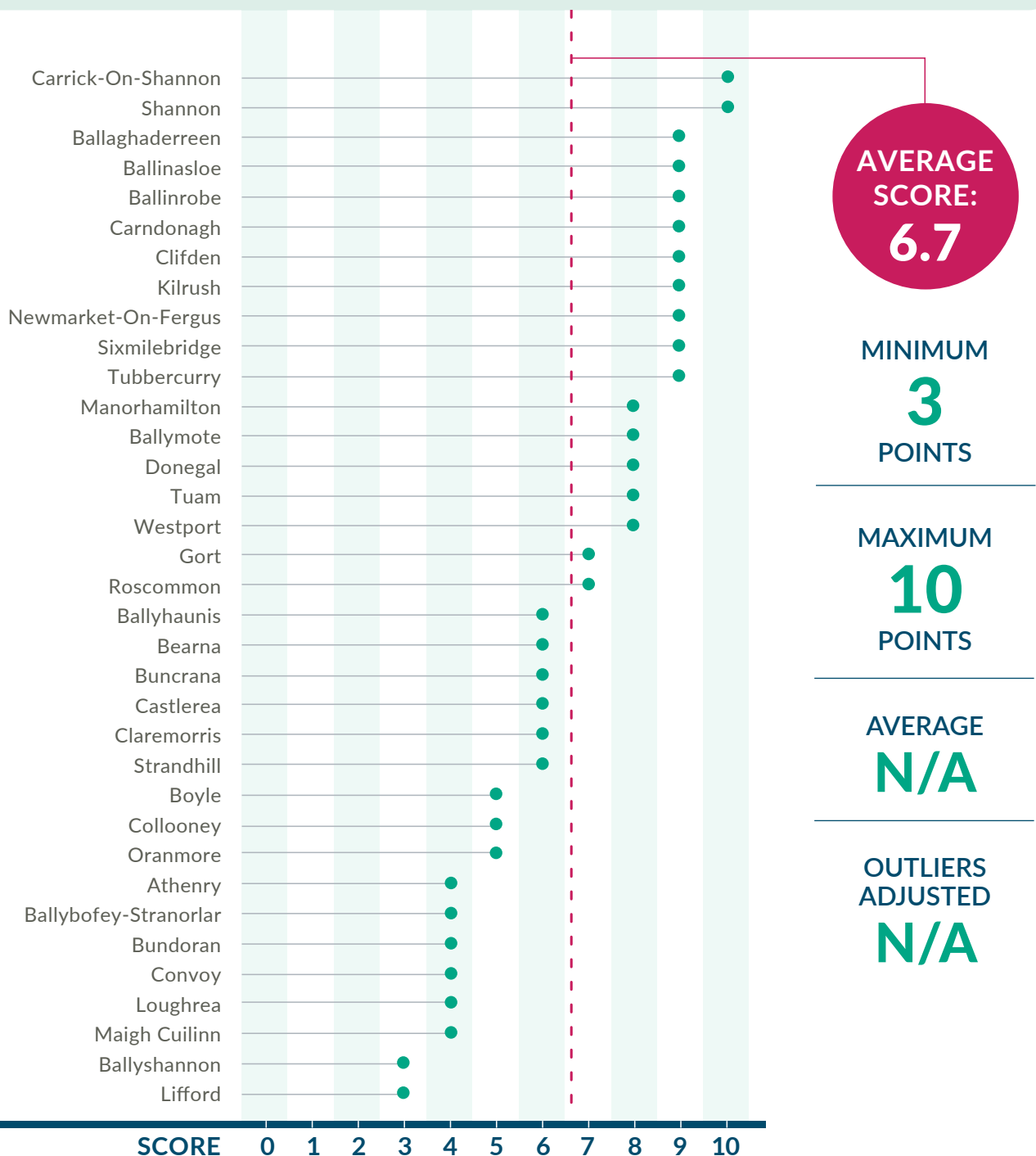
Definition: Walkability. Surveyed by WDC staff Towns scored 0,1, 2 for each category: Pavement condition; Walking to services; Crossing the road; Vehicle user behaviour; Attractiveness for walking

Source: WDC Survey

Data collected: June 2022

What does it show? Walkability is a key element of town mobility. This shows evidence of walkability and attractiveness for walking

Type: Low Carbon Transition Theme



Travel time by car to nearest hospital outpatient services

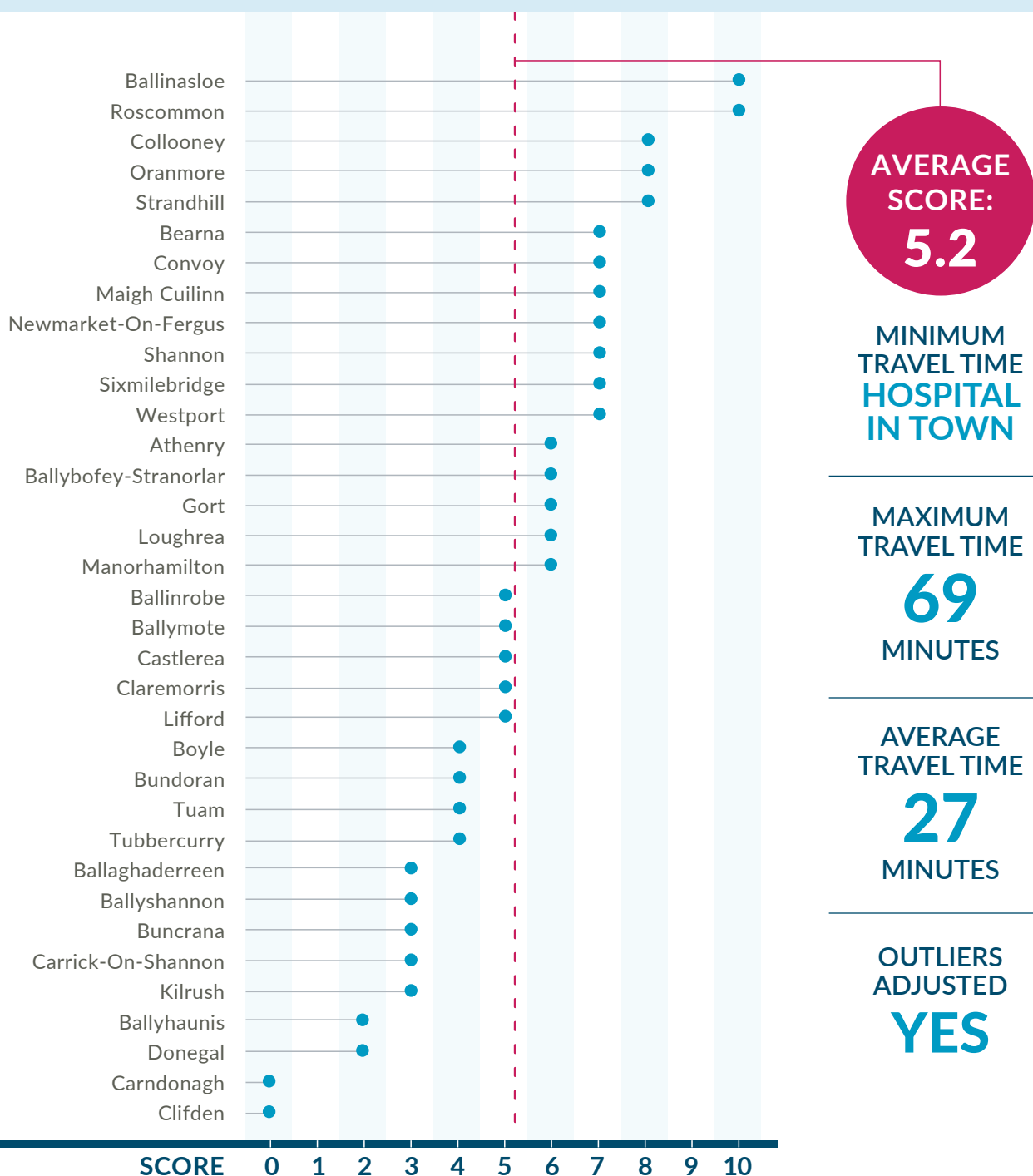
Definition: Time taken to travel by car to nearest hospital outpatient services². Where hospital is in the town travel time is set at 0

Source: Google Journey Time API – average of four departure times in the morning (07:45, 08:00, 08:15, 08:30, Tuesday 08/02/22)

Data collected: February 2022

What does it show? Hospital is a key service so travel to it is important. Travel by car is an important way to get to this service, so the indicator shows the variation by location

Type: Access to Services and Social Facilities (S&S)



² Using a different hospital for car and PT indicators if a different destination has better accessibility by one mode than the other. Northern Ireland hospitals not included as most ROI residents only have access to limited range of services

Travel time by car to the nearest international airport

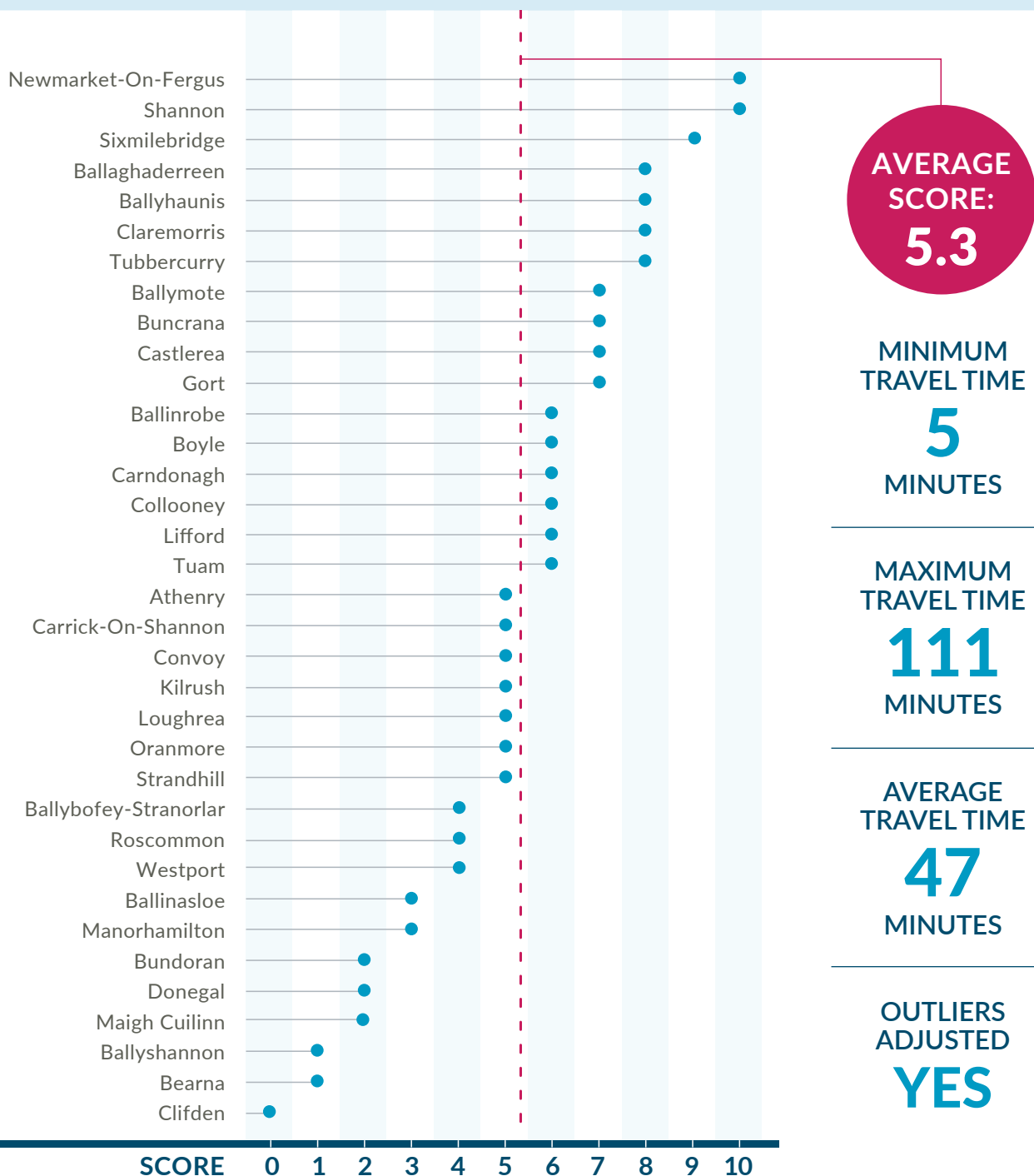
Definition: Time taken to travel by car to the nearest international airport³. Airport with shortest journey time by car chosen. This is not always the shortest distance.

Source: Google Journey Time API – average of four departure times in the morning (07:45, 08:00, 08:15, 08:30, Tuesday 18/01/22)

Data collected: January 2022

What does it show? Shows international accessibility which would be useful for town residents and visitors. Air access is important for business and social purposes

Type: Access to Services and Social Facilities (S&S)



³ Donegal Airport not used. No international flights when checked July 2022

Travel time by car to cultural services (theatre and cinema)

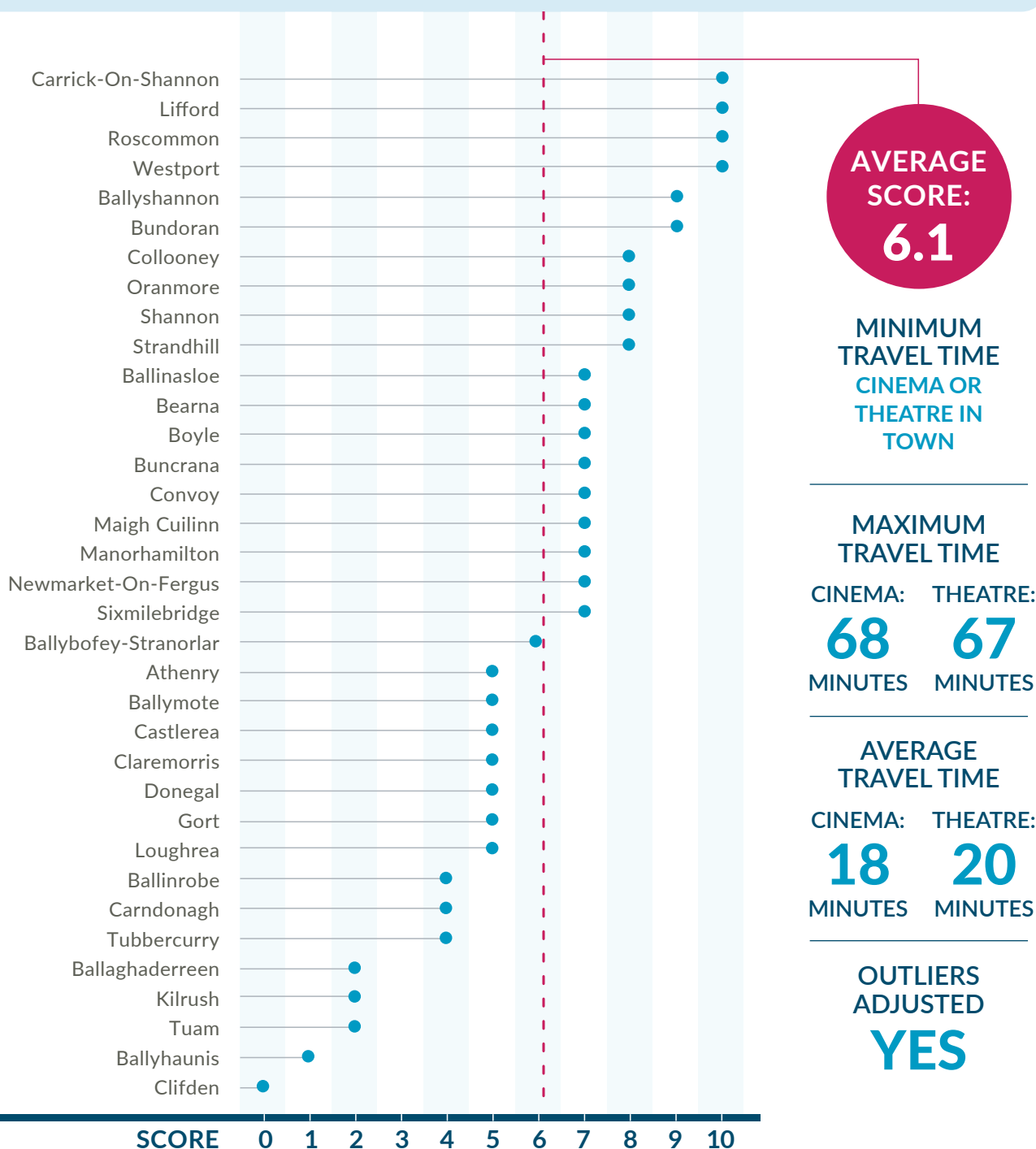
Definition: Time taken to travel by car to cinema and theatre. Time to both type of destination summed together and scoring based on total. Where there is a cinema or theatre within the town, the travel time for that facility is 0

Source: Car times to cinemas and to theatres/arts centres collected using Google Journey Time API – average of four departure times (18:30, 18:45, 19:00, 19:15, Saturday, 05/02/22)

Data collected: February 2022

What does it show? Measure of accessibility of important social option (for adults and children). Gives indication or broader mobility/level of service in a town and mobility for non essential purposes

Type: Access to Services and Social Facilities (S&S)



Public transport travel time to hospital outpatient

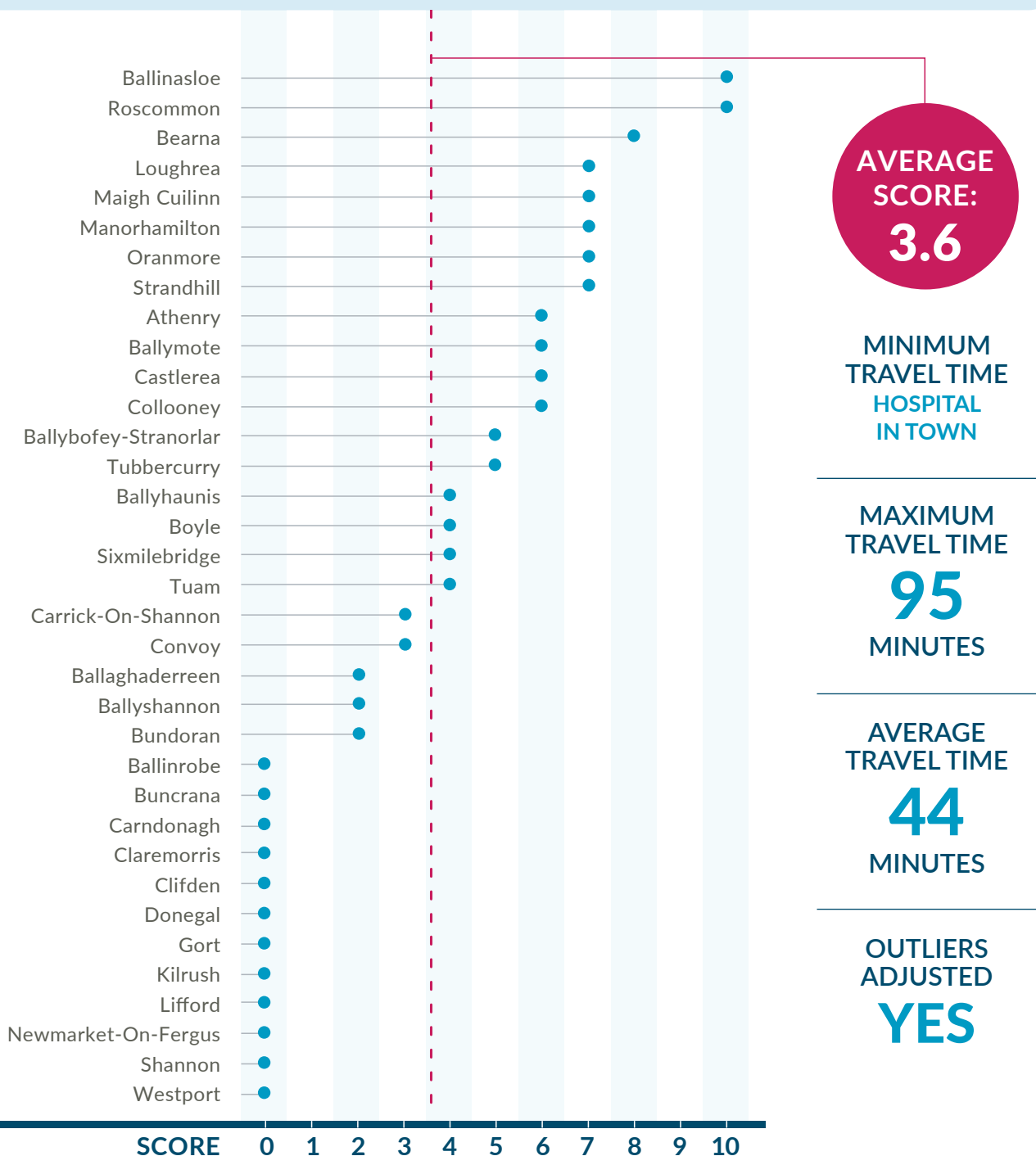
Definition: Time taken to travel by public transport to hospital outpatient service⁴. Allows for maximum 300m walk from bus stop to hospital. Towns with a hospital have been allocated a journey time of 0 mins

Source: Google Maps and based on schedules/timetables not actual travel time (morning, based on available public transport)

Data collected: January 2022

What does it show? Hospital is a key service so travel to it is important. Many people travelling to hospital service are not in a position to drive or be driven so being able to get to appointments easily and reliably by public transport is very important

Type: Access to Services and Social Facilities (S&S)



⁴ Using a different hospital for car and PT indicators if a different destination has better accessibility by one mode than the other. Northern Ireland hospitals not included as most ROI residents only have access to limited range of services

Public transport travel time to nearest airport with international services

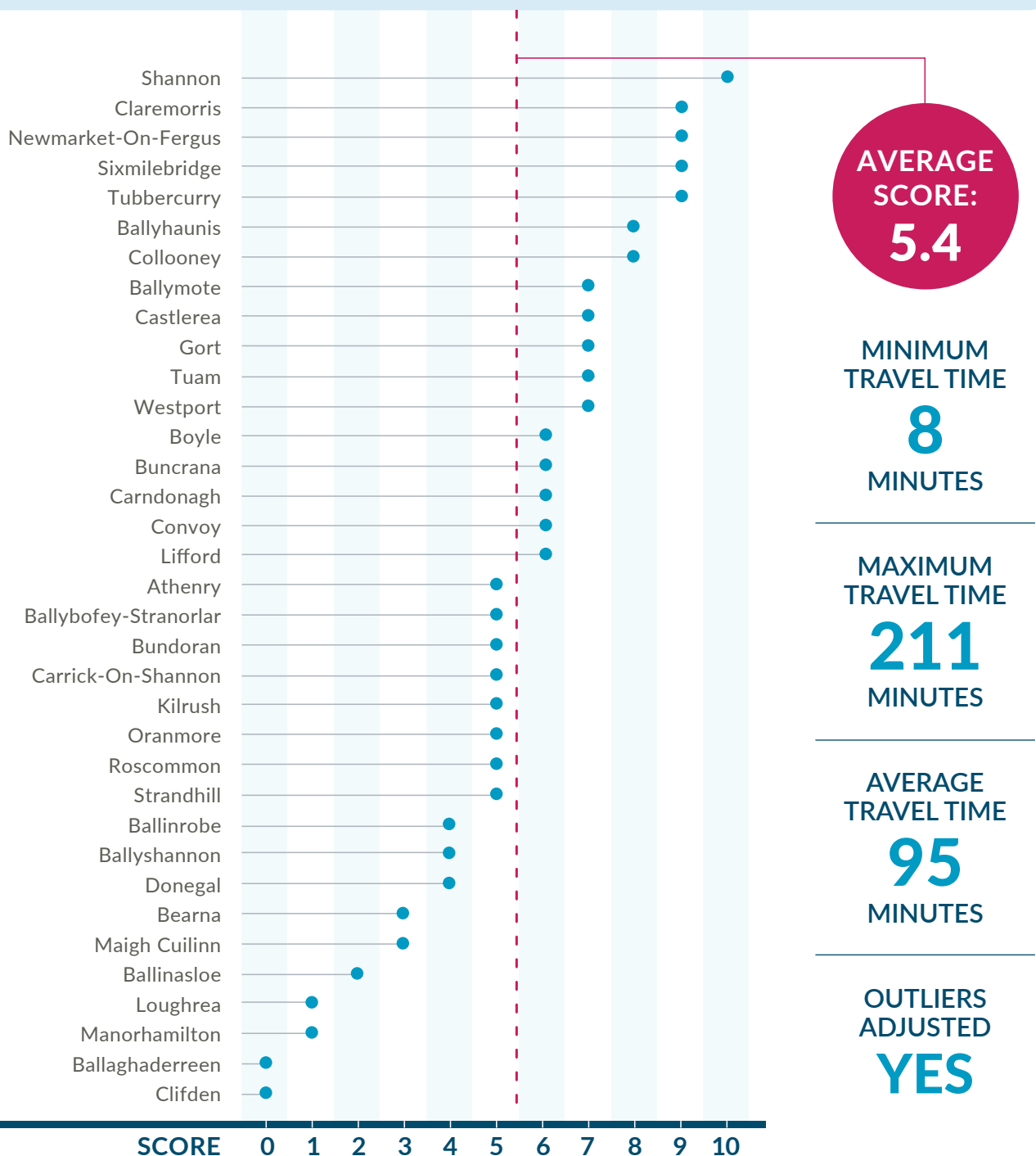
Definition: Time taken to travel by public transport to airport with international services⁵. Uses journey time for departures between 7am and 9am, if there is no public transport departure available in this time window, have taken the next earliest departure

Source: Google Maps and based on schedules/timetables not actual travel time (based on available public transport)

Data collected: February 2022

What does it show? Shows international accessibility which would be useful for town residents and visitors. Public Transport is important for visitors and those who don't want to leave car at airport/can't get a lift

Type: Access to Services and Social Facilities (S&S)



⁵ Using a different destination for car and PT if a different destination has better accessibility by one mode or the other

Evening public transport service to and from larger town (after 7pm)

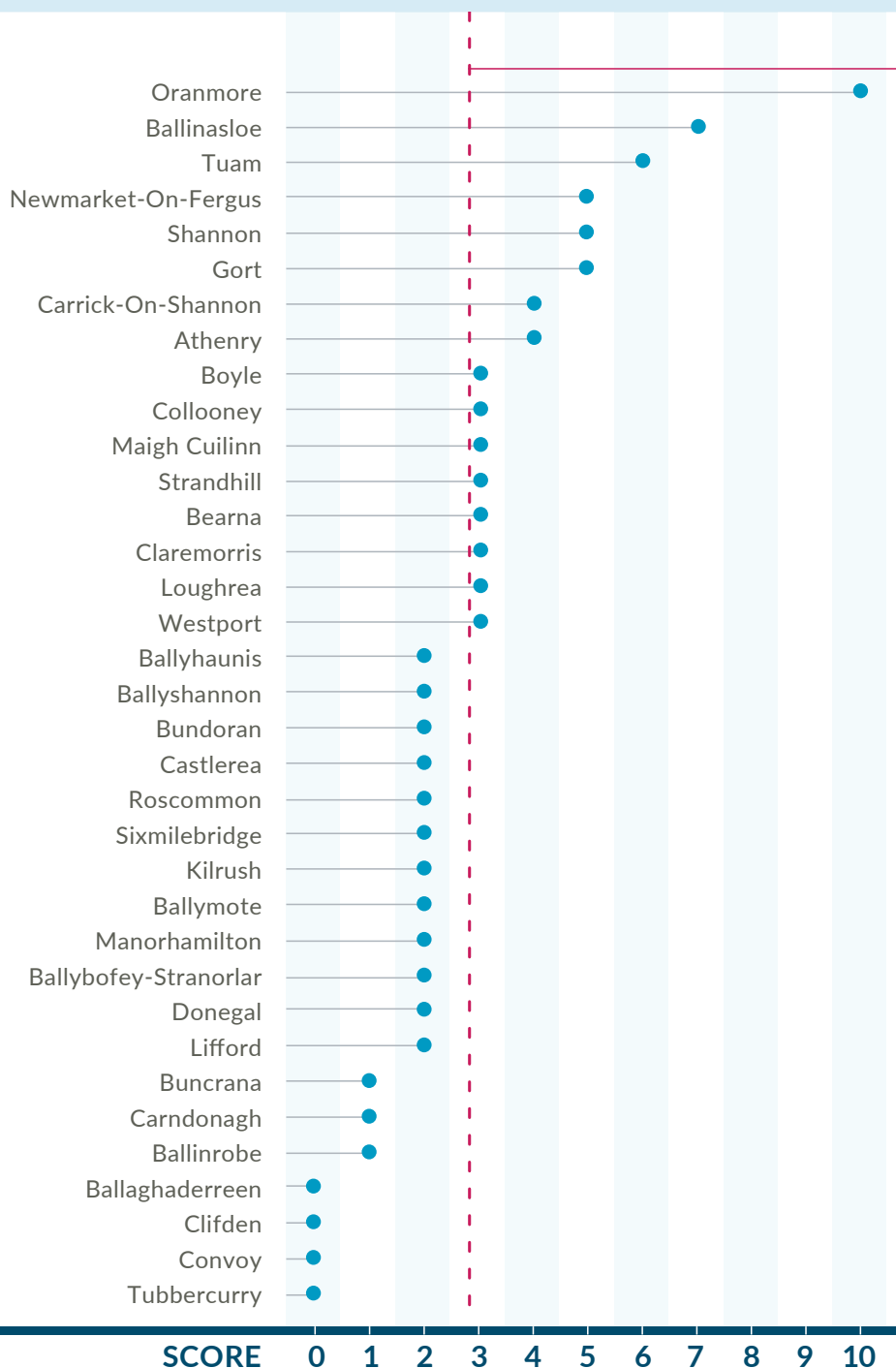
Definition: Combined Number of services departing after 7pm on a weekday to nearest 10,000+ town (5 points) and Number of services to the town from the nearest 10,000+ town which depart the 10,000+ town after 7pm weekdays (5 points)

Source: Google Maps and based on schedules/timetables not actual travel time (based on available public transport)

Data collected: January 2022

What does it show? Shows whether the town is accessible by public transport for social/ entertainment purposes outside hours of employment/ services. Important to know if the town is served by public transport allowing people to socialise (either without a car or choosing not to use their car)

Type: Access to Services and Social Facilities (S&S)



AVERAGE SCORE: 2.8

MINIMUM NO. OF SERVICES 0

MAXIMUM NO. OF SERVICES
14 FROM TOWN **24 TO TOWN**

AVERAGE NO. OF SERVICES
2.4 FROM TOWN **3 TO TOWN**

OUTLIERS ADJUSTED YES

Percentage using active travel and public transport modes to primary school

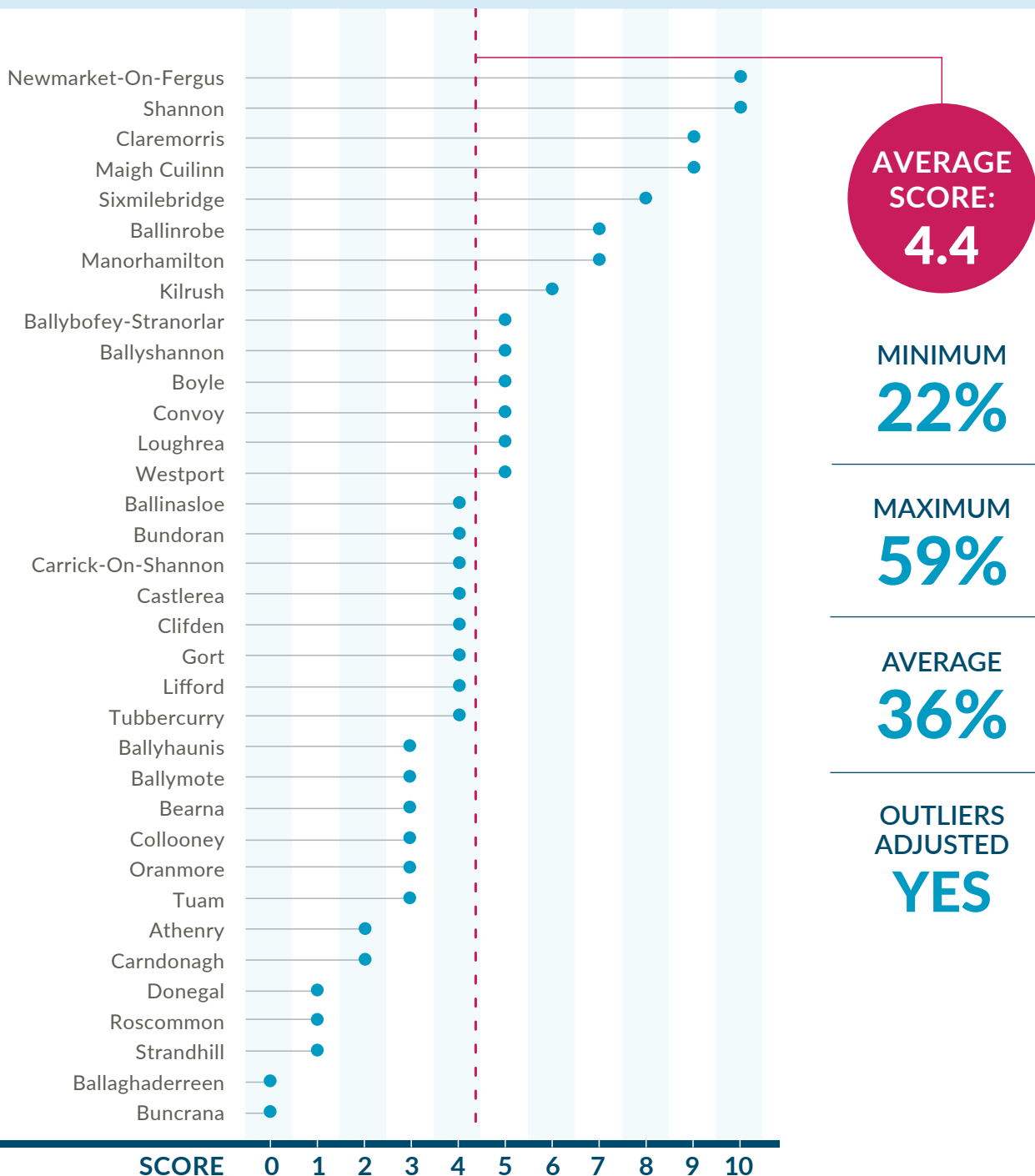
Definition: Combined mode share of public transport and active modes for travel to primary school among residents of the CSO settlement. 'Not stated' excluded before calculating percentages

Source: Usual mode of travel, Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Shows use of public transport and active travel mode for primary school. There is one in each town and so active travel should be possible

Type: Access to Services and Social Facilities (S&S)



Number of publicly provided designated disabled parking spaces

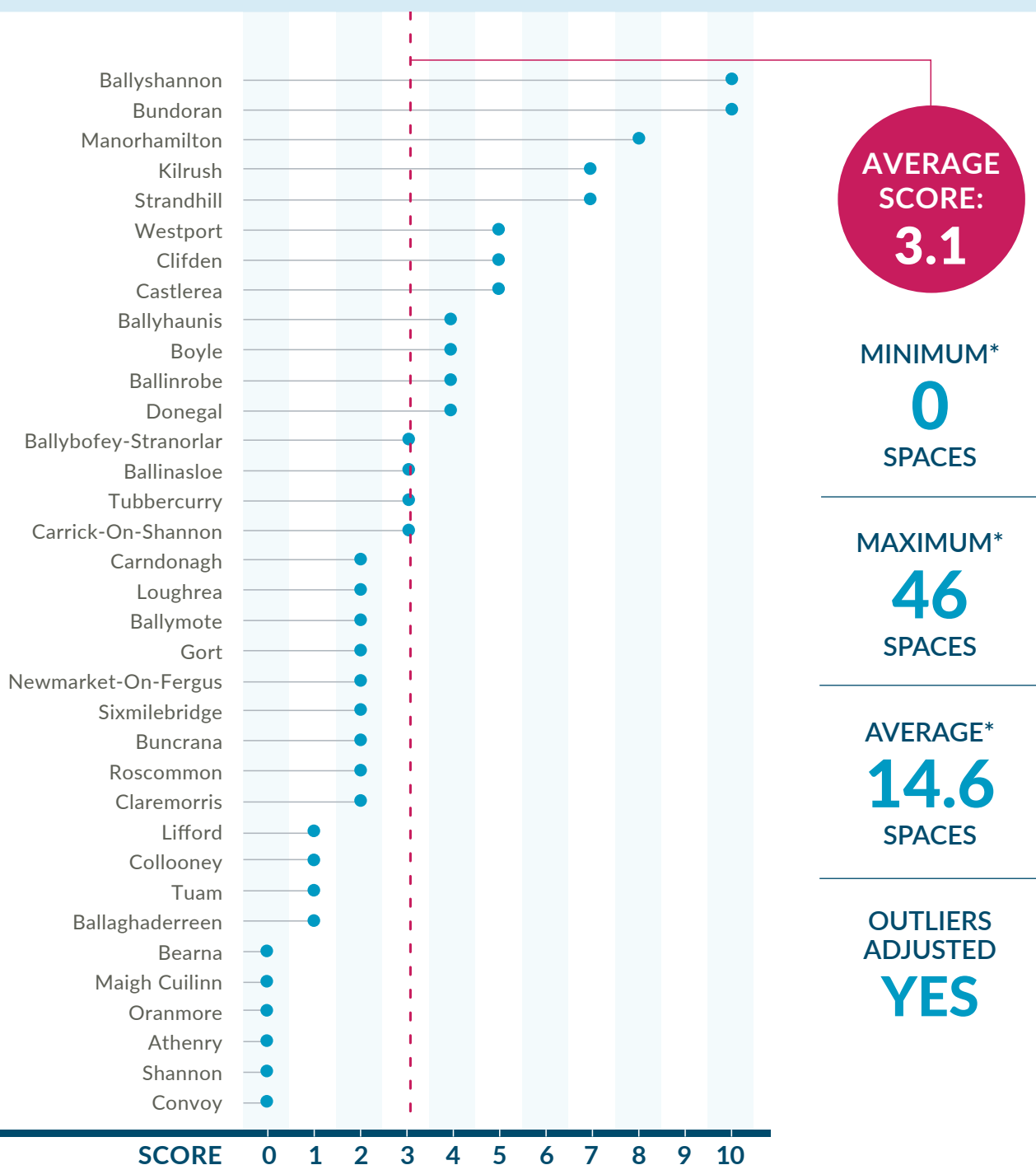
Definition: Number of publicly provided designated disabled parking spaces. Privately provided (e.g. at supermarkets) not included and it is possible that good private provision in good location may have relieved the need for public provision

Source: Data from LA survey. Where no data on parking spaces provided then WDC survey data used⁶. Adjusted for town population and also adjusted for outliers

Data collected: February 2022; Confirmed October 2022

What does it show? Important indicator, essential for making town usable by people with personal mobility difficulties

Type: Access to Services and Social Facilities (S&S)



⁶ before adjustment for population
⁶ Ballybofey-Stranorlar; Convoy; Shannon

Best Universal Design score for bus stop in town

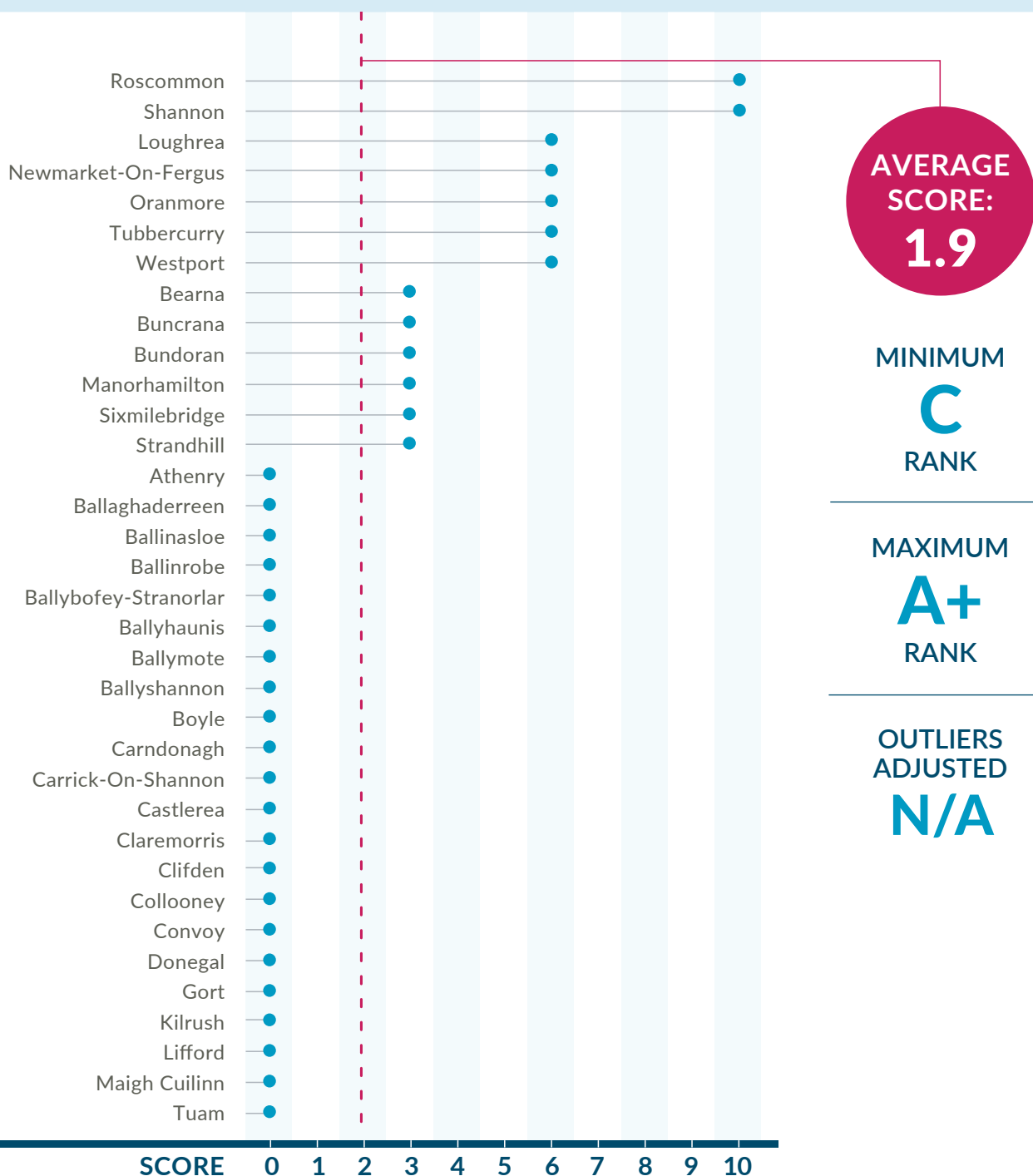
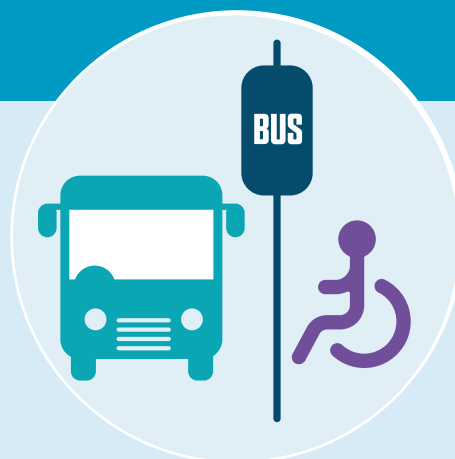
Definition: Best Universal Design (UD) score for a bus stop in the town. This Indicator was scored very simply on the basis of whether there was any bus stop in the town scoring more than the basic rank. Ranks (Scores) were C (0), B (3), A (6), A+(10).

Source: Data on the UD score for bus stops was provided by the NTA who have a complete analysis of all bus stops

Data collected: December 2021

What does it show? Important indicator, essential for making town usable by people with personal mobility difficulties

Type: Access to Services and Social Facilities (S&S)



Standard single public transport fare to large (10k) town

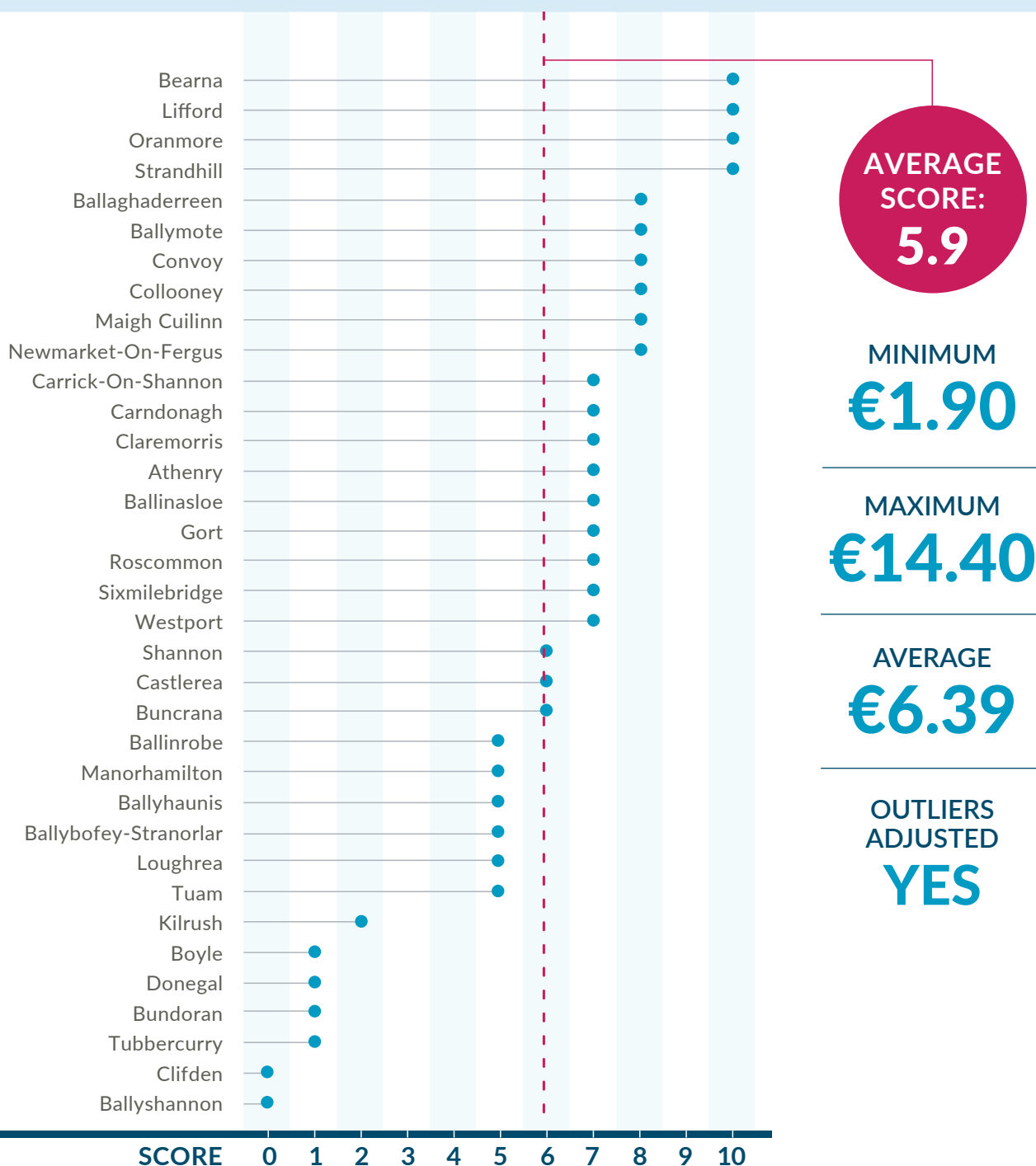
Definition: Standard single public transport fare to large (10k) town. The fare used is that for the service used for 'PT time to 10,000 town' indicator

Source: Data collected by WDC from Transport providers —updated after fare reductions using websites and phone (for private operators)

Data collected: Updated June 2022

What does it show? Important indicator, essential for making town usable by people with personal mobility difficulties

Type: Access to Services and Social Facilities (S&S)



Availability of public transport to 10k town (arriving by 9am)

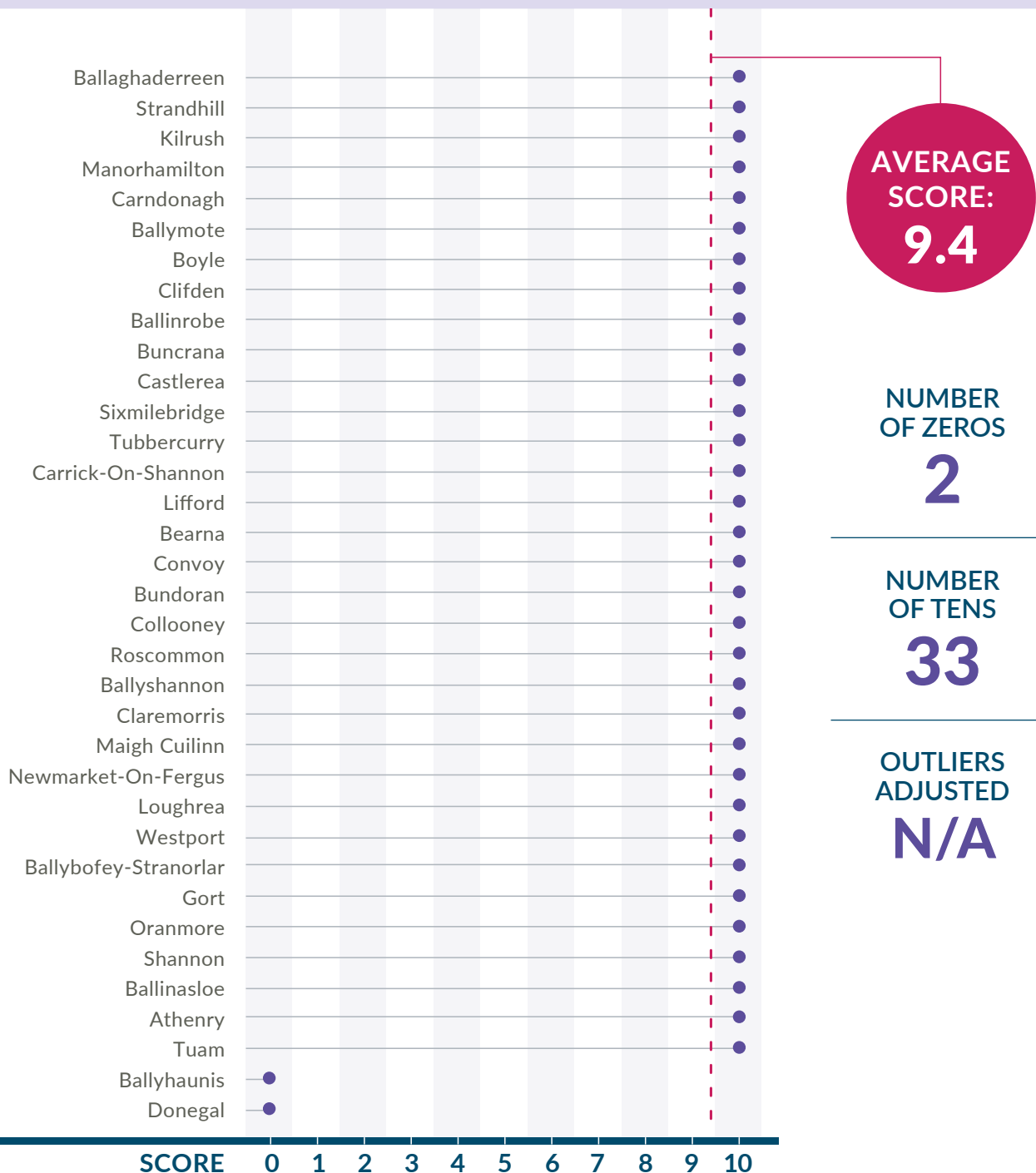
Definition: Availability of a public transport service to 10k town to arrive before 9am (Monday to Friday)

Source: Google Maps Service information

Data collected: March 2022

What does it show? Shows whether it is possible to get to important employment centre by public transport in time for work. Key mobility indicator for employment/economy and accessibility for those without cars

Type: Access to Economic and Employment Opportunities (E&E)



Level of public transport service to a 10k town (6am-8pm)

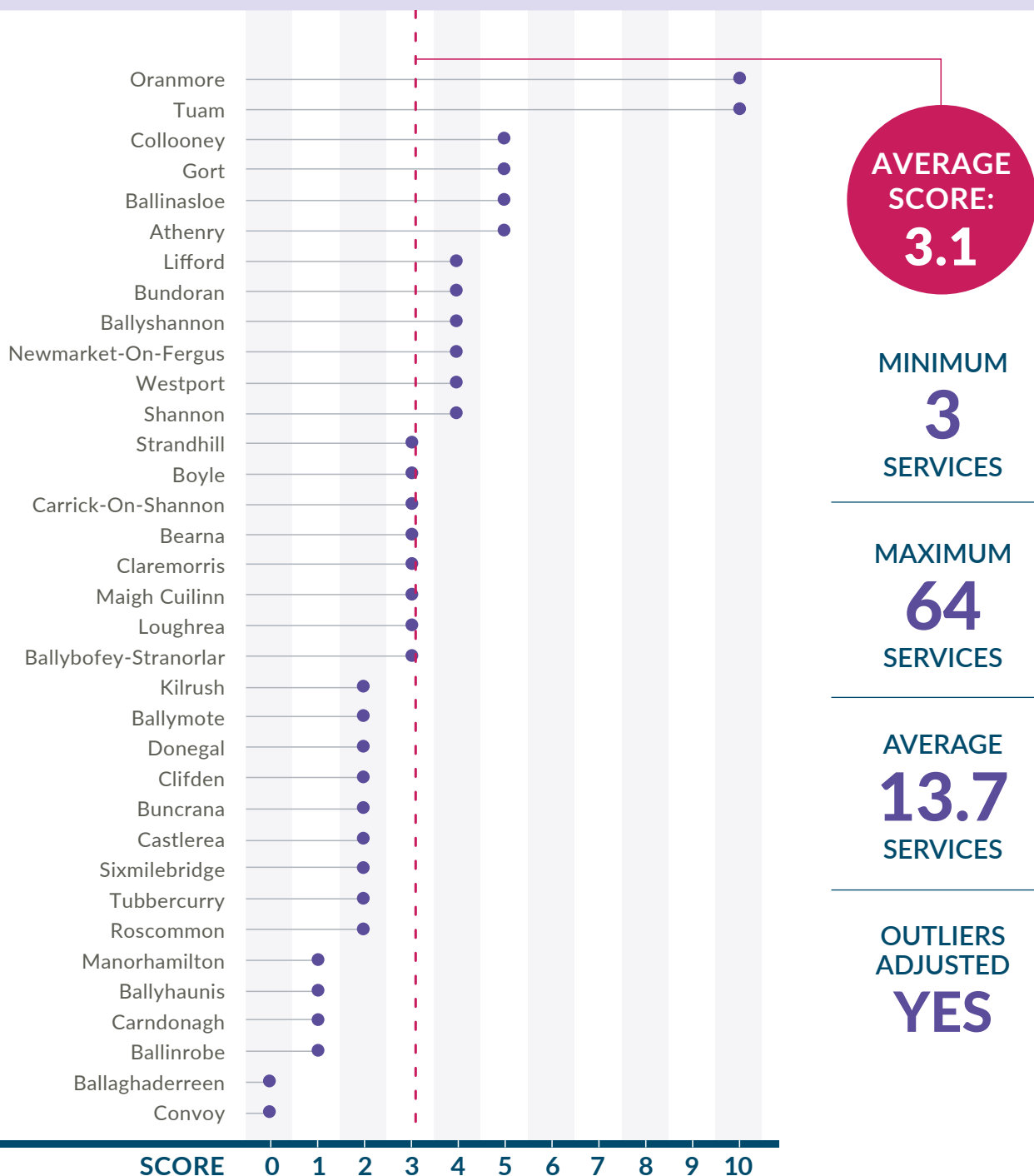
Definition: Number of public transport services to 10k town between 6am and 8pm

Source: Google Maps Service information

Data collected: March 2022

What does it show? Useful measure of access to a large town by public transport

Type: Access to Economic and Employment Opportunities (E&E)



Level of service in the morning (6.30am-9.00am to any town)

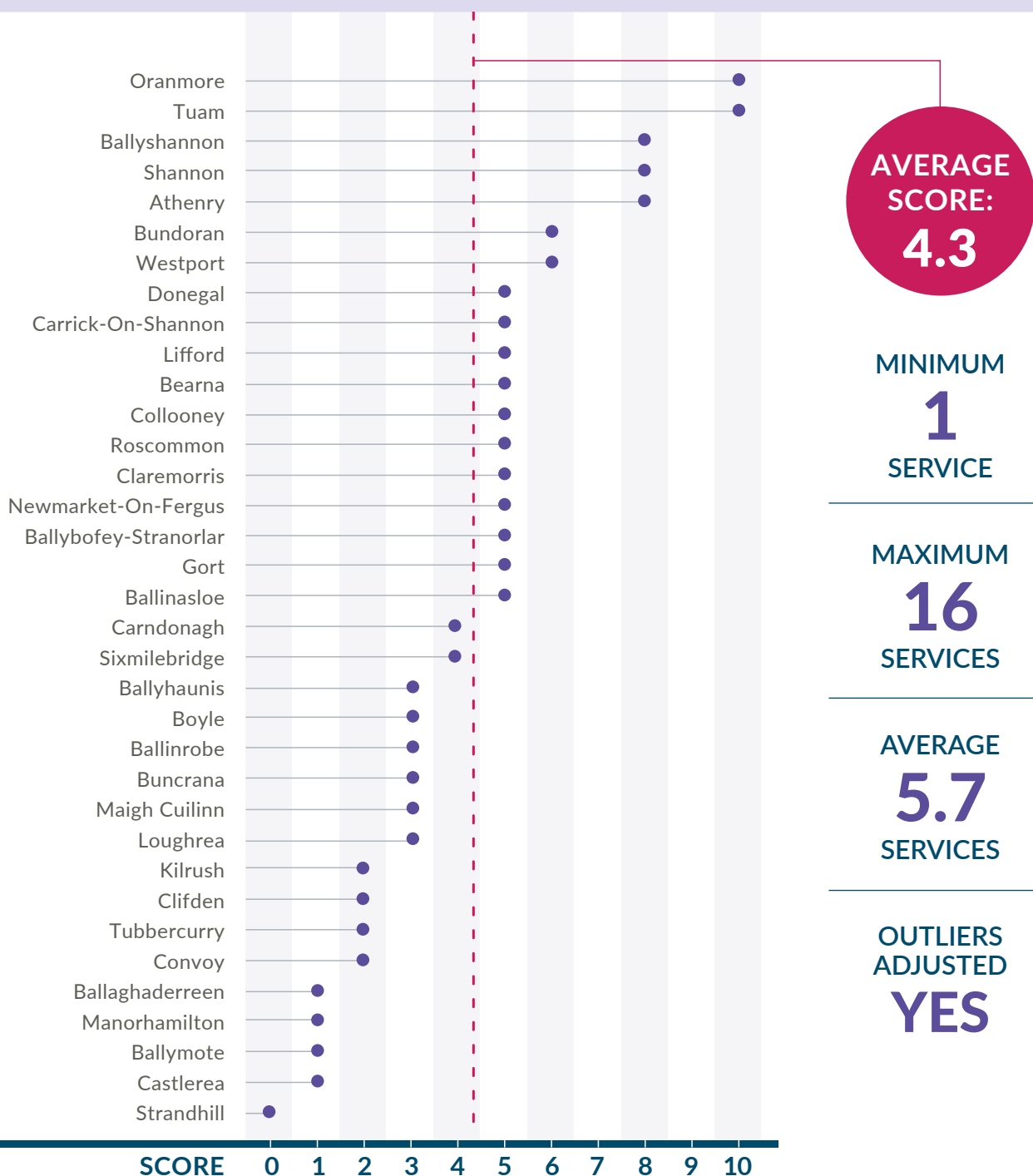
Definition: Availability of a public transport service in the morning to any nearby town (Monday to Friday)

Source: Google Maps Service information

Data collected: March 2022

What does it show? Shows whether it is possible to get to other centres by public transport in time for work. Important mobility indicator for employment/economy and accessibility for those without cars

Type: Access to Economic and Employment Opportunities (E&E)



Public transport to reach 50k city by 9am

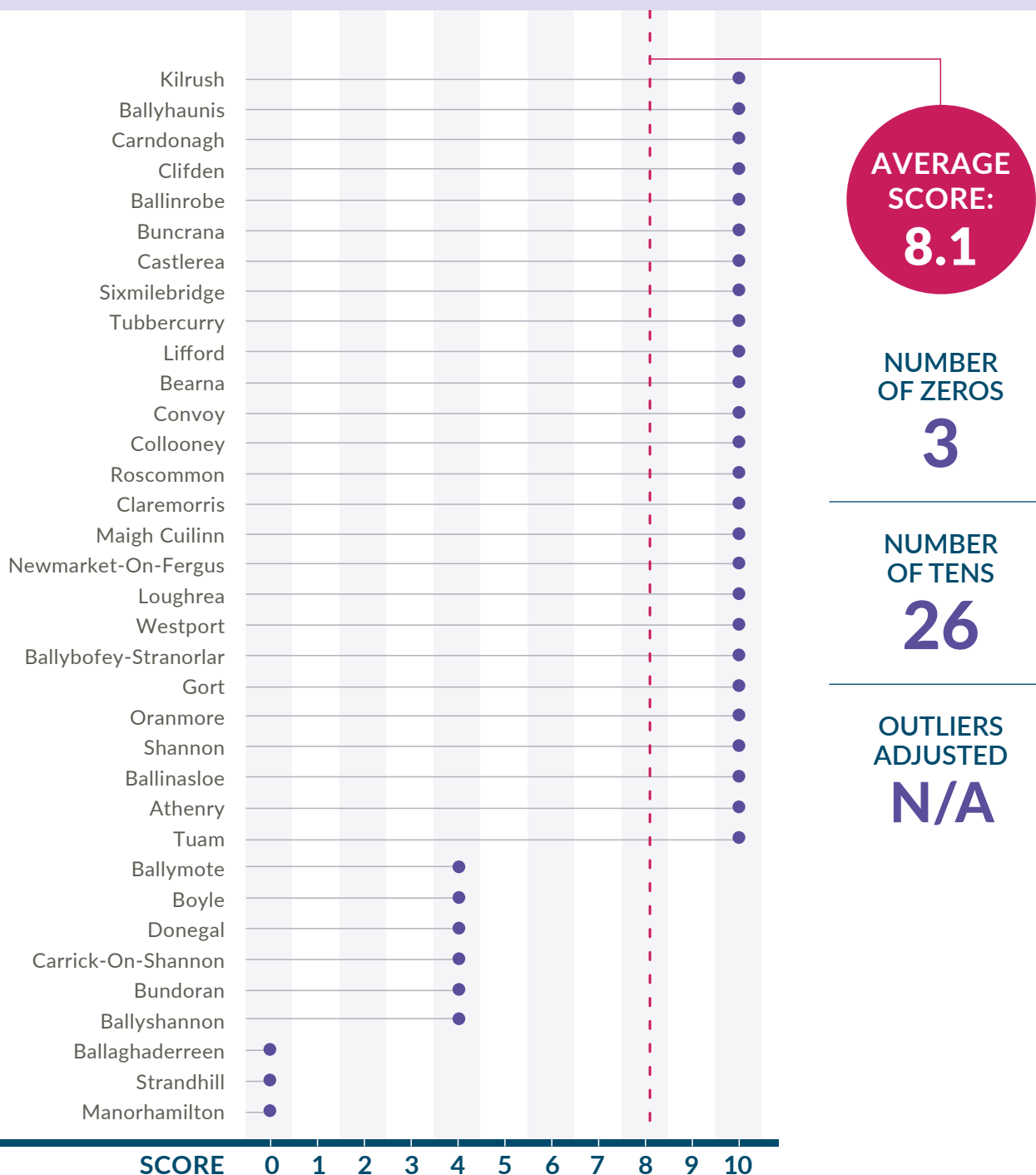
Definition: Availability of public transport service to nearest 50k city to arrive before 9am. Scores 10 if this is available, Scores 4 if it is possible to reach city by 11am and 0 if that is not possible.

Source: Google Maps Service information

Data collected: March 2022

What does it show? Shows whether it is possible to get to large employment centre by public transport in time for work. Important mobility indicator for employment/economy and accessibility for those without cars.

Type: Access to Economic and Employment Opportunities (E&E)



Percentage of towns within 30km radius reachable by public transport

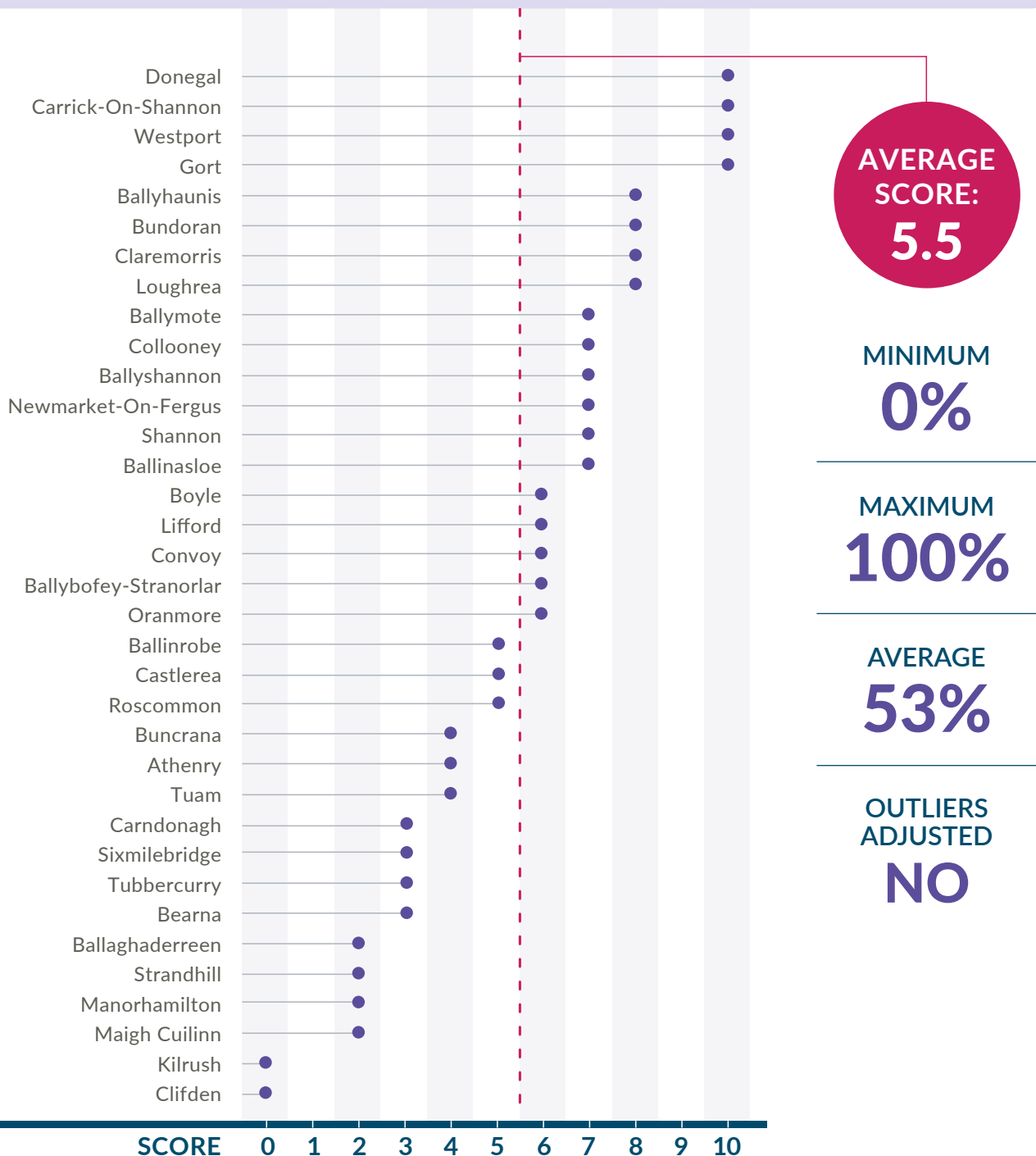
Definition: Percentage of towns over 1,500 population within 30k radius to which a daytrip is possible using public transport (includes same day return)

Source: Google Maps Service information

Data collected: March 2022

What does it show? Useful measure of mobility not reliant on car travel: broader than to the 10k towns and larger town, more holistic picture of public transport

Type: Access to Economic and Employment Opportunities (E&E)



Ratio of public transport journey time to car journey time to 10k town

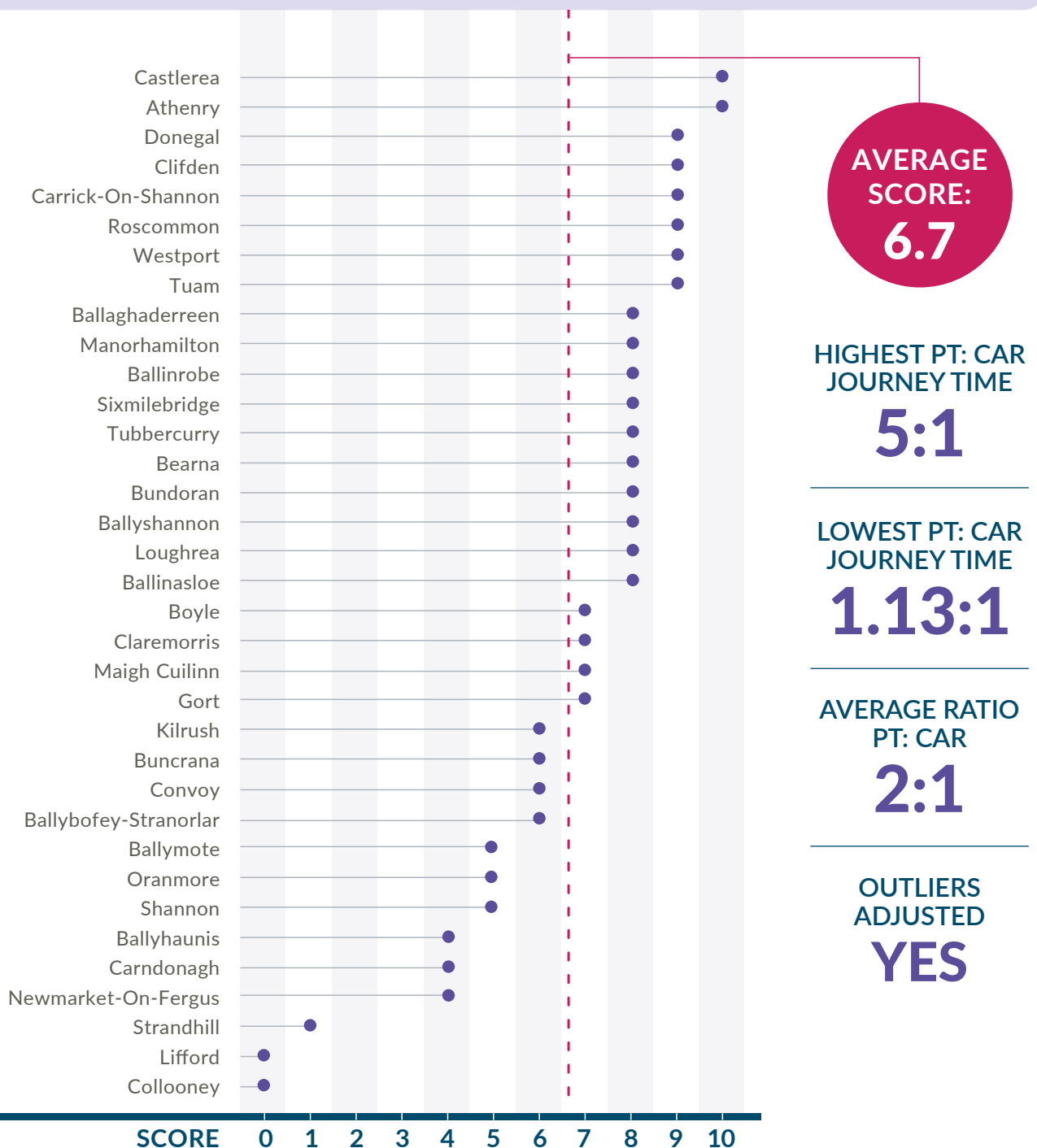
Definition: Ratio of public transport journey time to car journey time to a large (10k) town. Access/egress & wait time allowance added to PT times (10 min access/egress, 5 min waiting) before ratio calculated. Highest scores where public transport and car time are closest. Lowest when car is considerably quicker (higher ratio)

Source: Car times from Google Journey Time API- based on travel to a central location and access/egress and waiting allowance added to actual/timetabled. from Google Maps, based on schedules/timetables not actual travel time

Data collected: January 2022

What does it show? Shows relative difference between car and public transport modes.

Type: Access to Economic and Employment Opportunities (E&E)



Ratio of public transport journey time to car journey time to 50k city

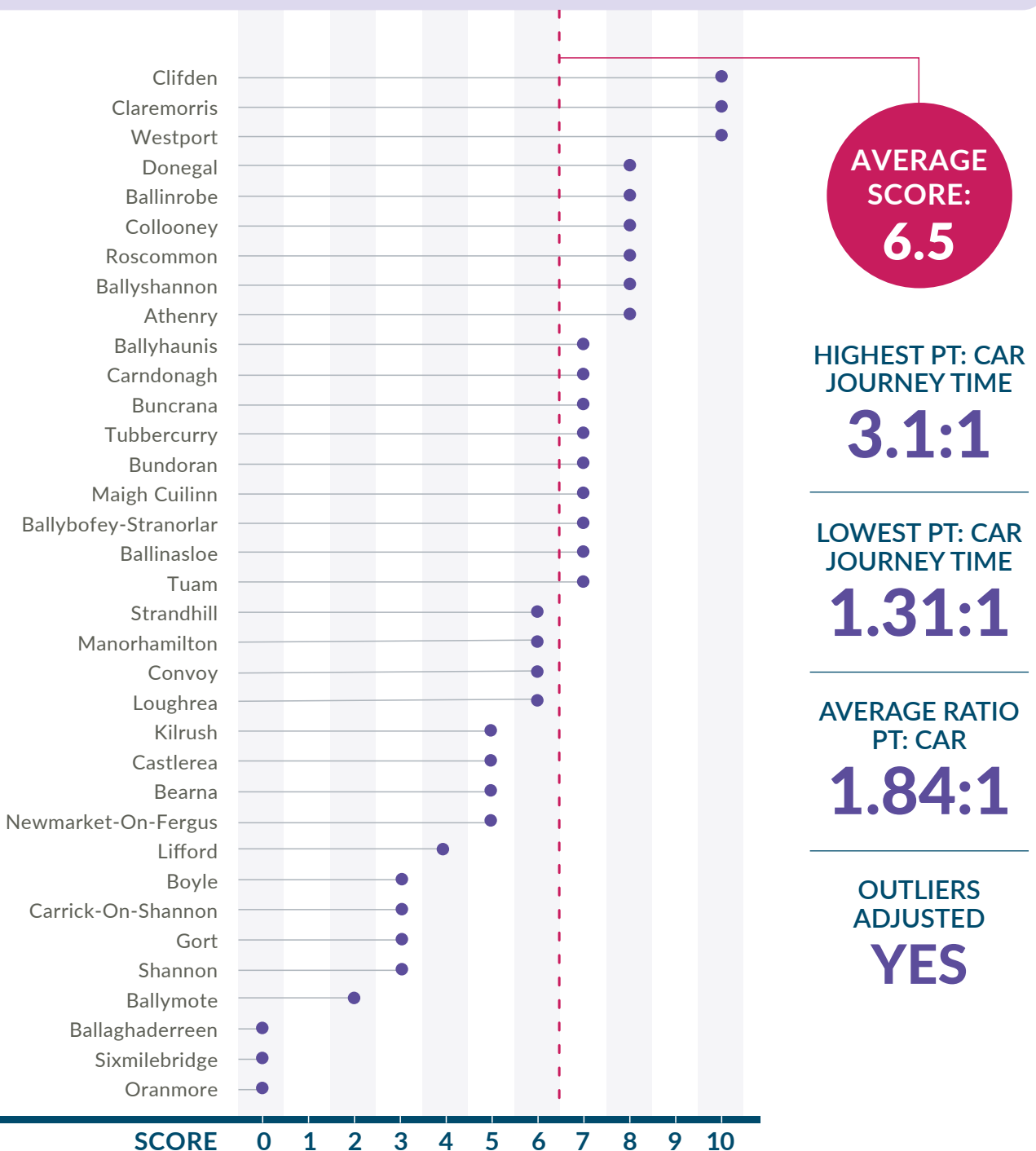
Definition: Ratio of public transport journey time to car journey time to a 50k city. Access/egress & wait time allowance added to PT times (10 min access/egress, 5 min waiting) before ratio calculated. Highest scores where public transport and car time are closest. Lowest when car is considerably quicker (higher ratio)

Source: Car times are using National Transport Model – AM peak journey times. Average of travel time to all relevant zones within the 50,000 city. PT times from Google Maps, based on schedules/timetables not actual travel time

Data collected: January 2022

What does it show? Shows relative difference between car and public transport modes.

Type: Access to Economic and Employment Opportunities (E&E)



Car travel time to university

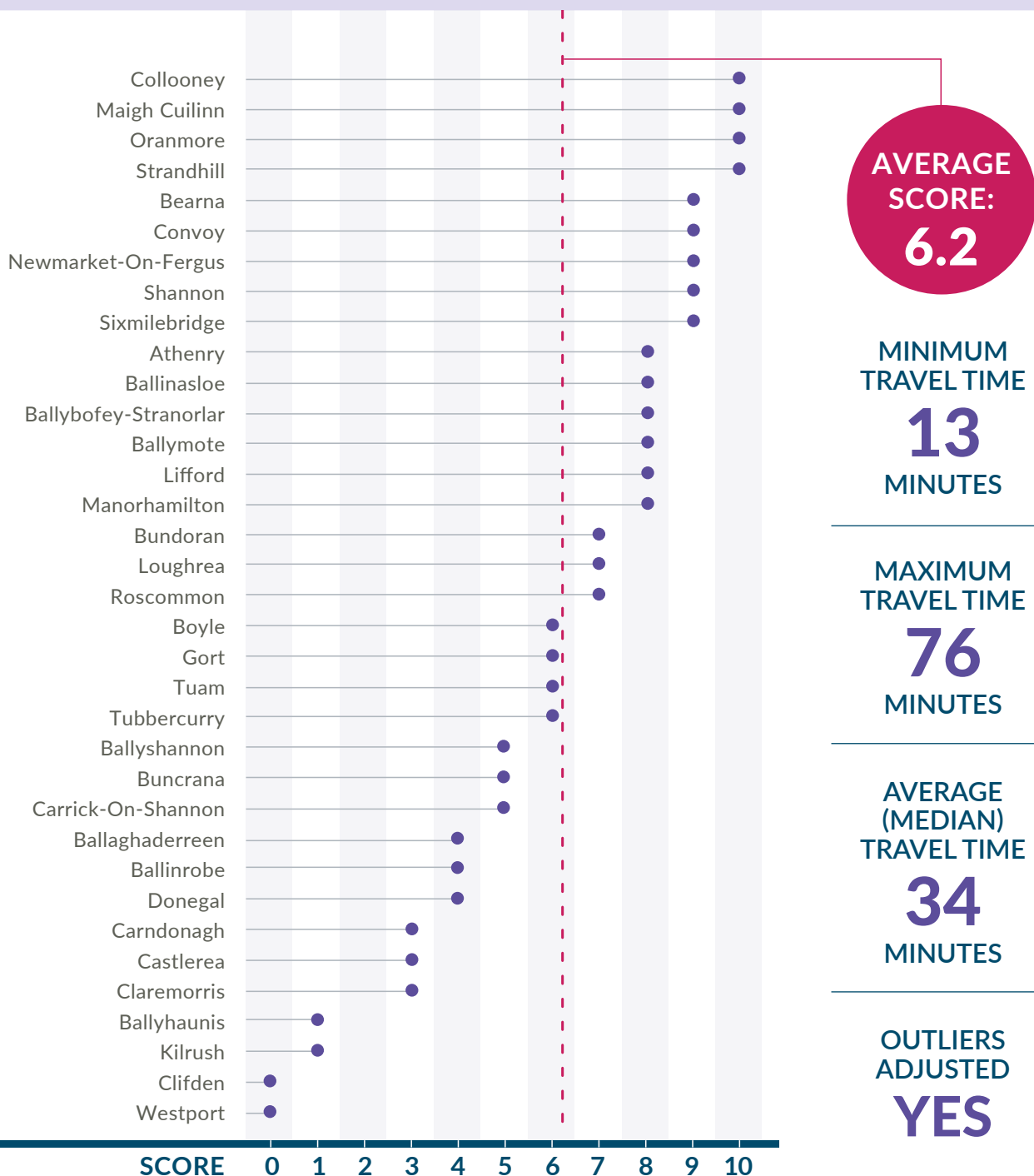
Definition: Car Travel Time to University during morning period.
Main campus only – satellite campus not included

Source: Car times are from Google Journey Time API – average of four departure times in the morning

Data collected: February 2022

What does it show? Shows the travel time for a student who can use a car to travel to university (and so may not need residential accommodation)

Type: Access to Economic and Employment Opportunities (E&E)



Public transport travel time to university

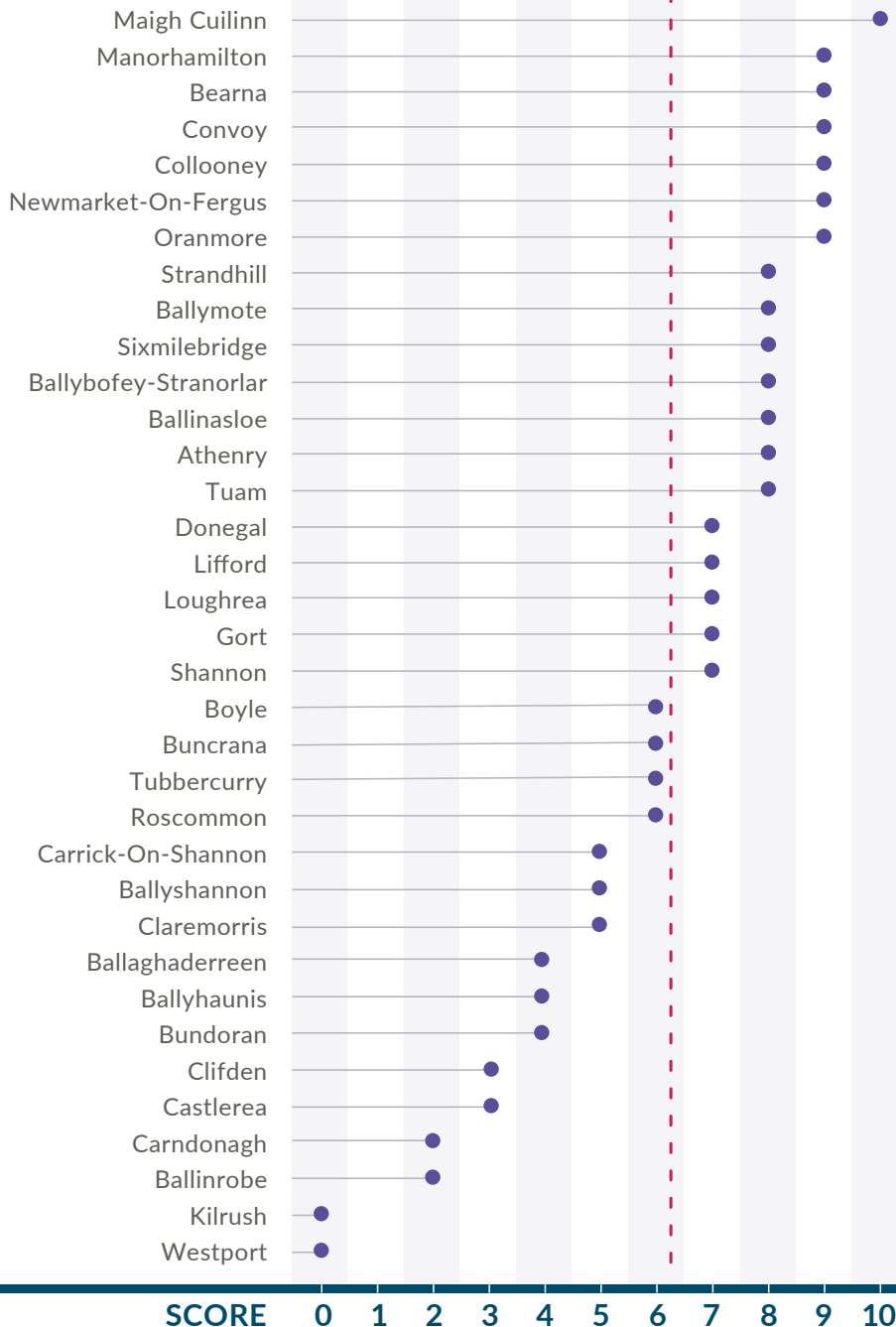
Definition: Public transport travel time to university during morning period.
Main campus only – satellite campus not included

Source: Google Maps and based on schedules/timetables not actual travel time (morning, based on available public transport)

Data collected: February 2022

What does it show? Many students can't drive, don't have access to a car or can't afford a car so it captures the possibility of getting to 3rd level on a daily basis using public transport for these students

Type: Access to Economic and Employment Opportunities (E&E)



AVERAGE SCORE:
6.2

MINIMUM TRAVEL TIME
16
 MINUTES*

MAXIMUM TRAVEL TIME
142
 MINUTES*

AVERAGE (MEDIAN) TRAVEL TIME
52
 MINUTES*

OUTLIERS ADJUSTED
YES

¹ *excl. access & waiting allowance

Percentage using active travel and public transport modes to work

Definition: Combined mode share of public transport and active modes for travel to work among residents of the CSO settlement. 'Not stated' excluded before calculating percentages

Source: Usual mode of travel, Census of Population 2016, Profile 6 Commuting in Ireland

Data collected: April 2016

What does it show? Indicator of levels of public transport and active travel use for work commuting

Type: Access to Economic and Employment Opportunities (E&E)

