

# **NORTH EAST Regional Road Safety Resource**

**Project Report: 14**

## **Regional Overview of Elderly Pedestrian Casualties 2006-2008**

**Produced July 2009  
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## Introduction

This report has been produced by the NE Regional Road Safety Resource as an overview of elderly pedestrian casualties in the region over the last 3 years. For the purposes of this report, elderly refers to those pedestrian casualties who were aged 60 years and over at the time of injury. The data used to produce this report is based on the project database of Stats 19 provided by Cleveland, Durham, and Northumbria police forces.

## Profile of Elderly Pedestrian Casualties 2006-08

Elderly pedestrian casualties have remained at a fairly consistent level over the past 3 years, which goes against the trend for all pedestrian casualties which have seen small reductions year on year over the same period.

Elderly pedestrian casualties account for 15% of all pedestrian casualties in the NE region and 23% of pedestrian casualties who were killed or seriously injured (KSI). More significantly, elderly pedestrians account for **42%** of pedestrian deaths in the region. Elderly people account for 23% of the region's total population so there is an over-representation in elderly pedestrian fatalities; this shows that elderly road users are vulnerable.

**Figure 1: Elderly Pedestrian Casualties by Severity 2006-08**

Severity	2006	2007	2008	Total
Fatal	12	9	11	<b>32</b>
Serious	45	59	57	<b>161</b>
Slight	119	116	112	<b>347</b>
<b>Total</b>	<b>176</b>	<b>184</b>	<b>180</b>	

When broken down by sex there is little difference in the levels of casualties for all elderly pedestrian casualties, however, when looking at purely the KSI casualties there is a notable difference with higher levels of female casualties observed. The population figures for the region show that there are slightly higher levels of females and so this will account for some of this variance in casualties.

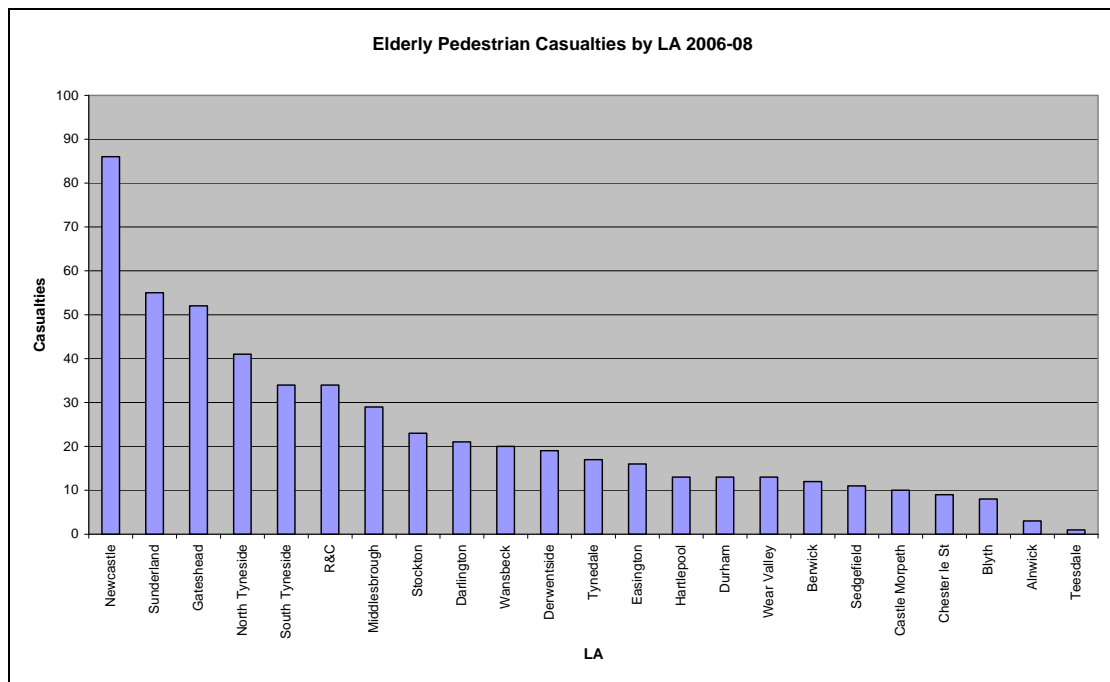
**Figure 2: Elderly Pedestrian Casualties by Sex 2006-08**

Sex	% of All elderly pedestrian casualties	% of KSI elderly pedestrian casualties
Male	49	40
Female	51	60

## Local Authority

Tyne & Wear have the highest levels of elderly pedestrian casualties in the region, making up 44% of the regions casualties. Urban areas in particular tend to show higher levels of elderly pedestrian casualties and this is inline with the regional trend for all pedestrian casualties.

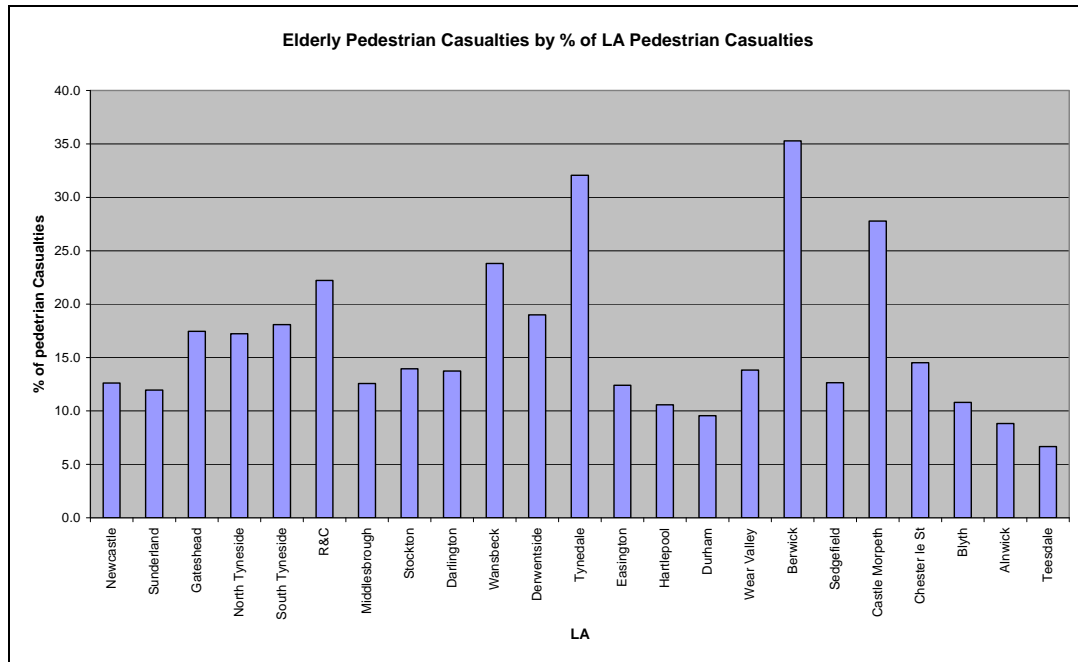
**Figure 3: Elderly Pedestrian Casualties by LA 2006-08**



However, when considering the elderly pedestrian casualties per local authority as a percentage of the total pedestrian casualties for that authority then the trend looks very different.

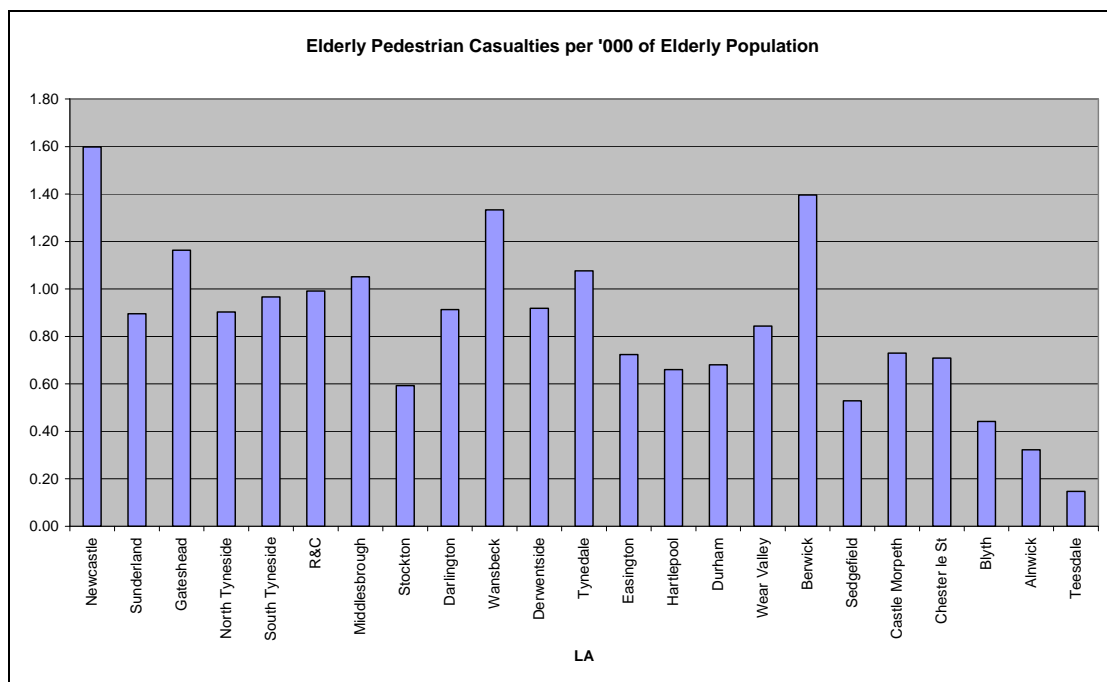
Rural areas of Northumberland, for example Berwick upon Tweed and Tynedale, show significantly higher levels of elderly pedestrian casualties as a percentage of their total pedestrian casualties. This shows that elderly pedestrian casualties are a more significant problem in certain areas of the region.

**Figure 4: Elderly Pedestrian Casualties as a % of Pedestrian Casualties per Local Authority**



Another way to look at elderly pedestrian casualties is per population. This shows which areas are over-represented with casualties. The figure below shows that Newcastle, Wansbeck, and Berwick upon Tweed show the highest levels of elderly pedestrian casualties per '000 population.

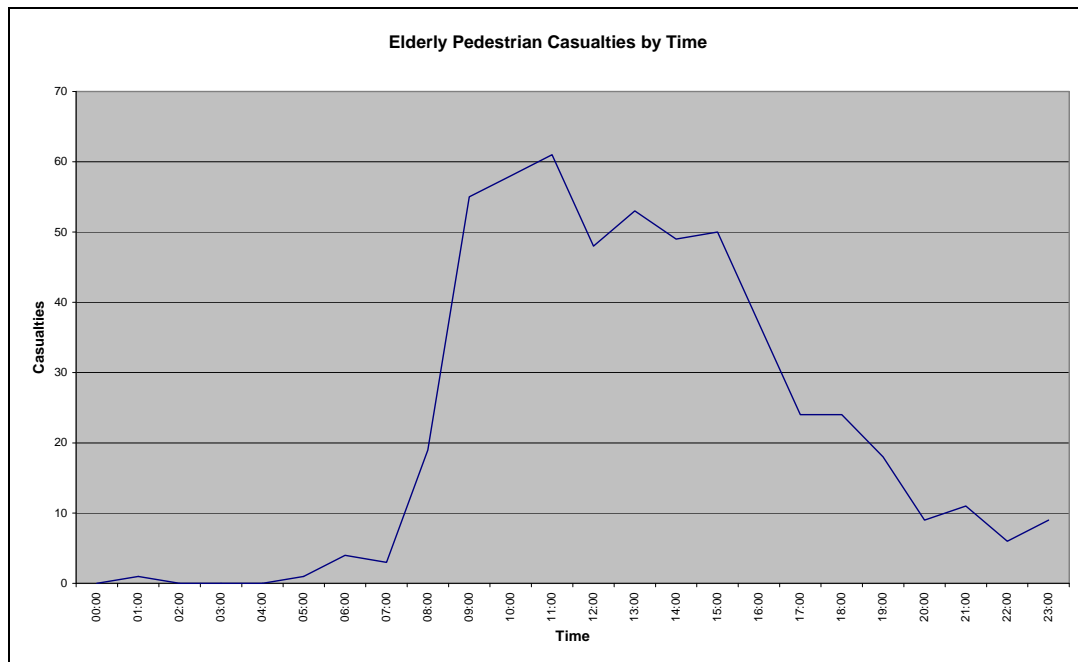
**Figure 5: Elderly Pedestrian Casualties per Area Population 2006-08**



## Time of Day

Elderly pedestrian casualties peak and remain high between 9am and 3pm, in fact this period accounts for nearly 70% of the daily casualties. Unlike other age groups, elderly pedestrian casualties do not show definite peaks inline with key commuting times, most likely because a higher proportion do not work due to retirement.

**Figure 6: Elderly Pedestrian Casualties by Time of Day 2006-08**



82% of all elderly pedestrian casualties occur in daylight. However, there is an increased chance that if an elderly pedestrian is injured in darkness the injury will be more severe.

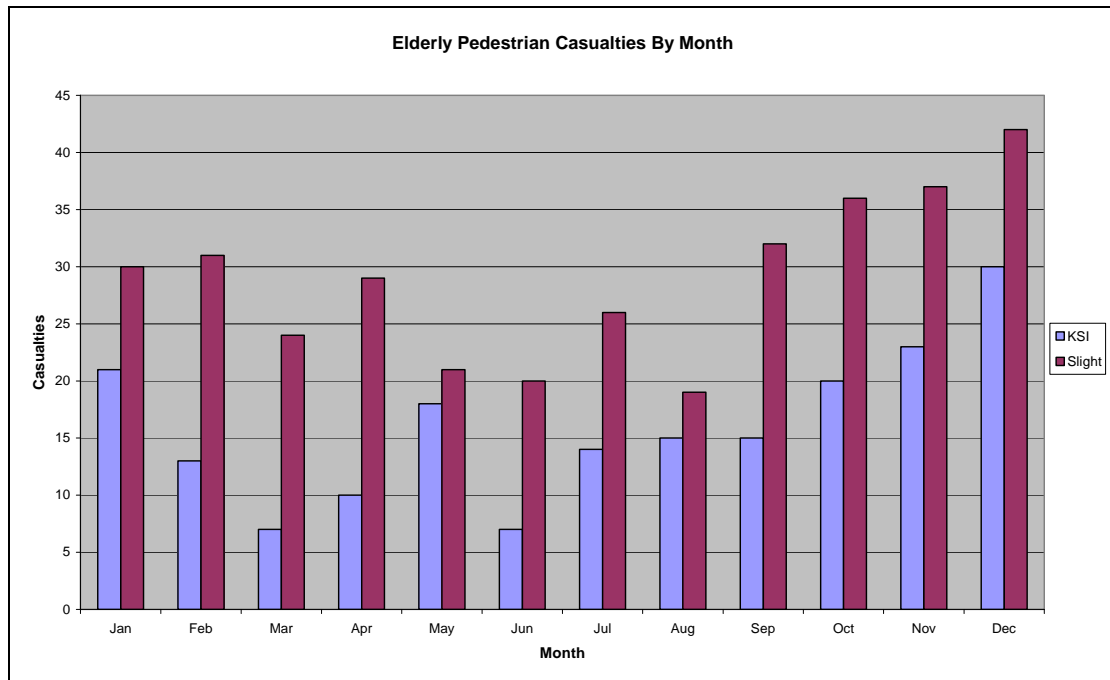
**Figure 7: Elderly Pedestrian Casualties by Visibility 2006-08**

Visibility	% of Casualties KSI	% of Casualties Slight
Daylight	34%	66%
Darkness	45%	55%

## Month

Elderly pedestrian casualties are higher during the winter months and peak in December. This is also the period in which KSI elderly pedestrian casualties are at the highest levels too. June shows the lowest levels of casualties. These trends are mirrored when looking at all pedestrian casualties in the NE region.

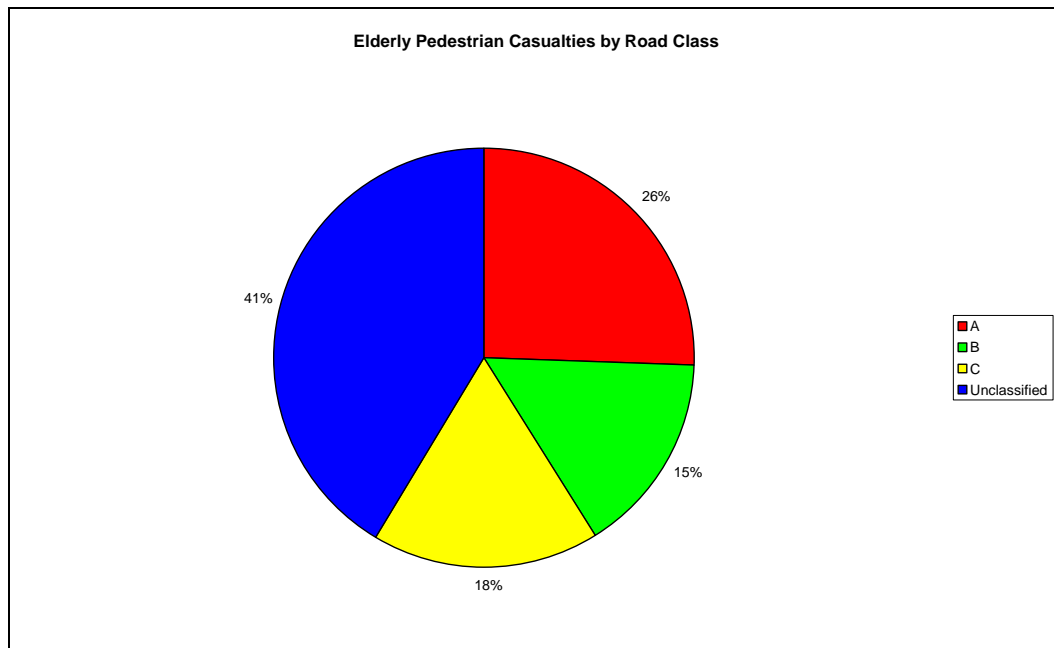
**Figure 8: Elderly Pedestrian Casualties by Month 2006-08**



## Road Class

The highest proportion of elderly pedestrian casualties occurs on Unclassified roads in the region. This is inline with the trend for all pedestrian casualties in the region.

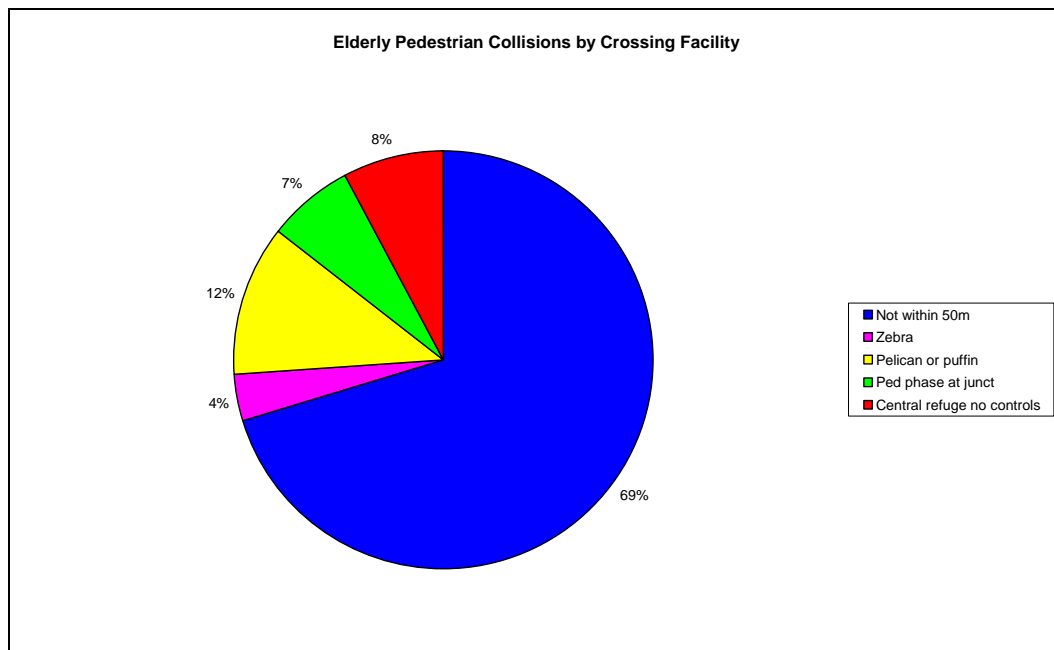
**Figure 9: Elderly Pedestrian Casualties by Road Class 2006-08**



## Crossing Facility

69% of elderly pedestrians are injured crossing the road away from a crossing facility; therefore in less secure places to cross. This is very similar to the trend for all pedestrian casualties. There is also no difference in the proportions injured whilst using the other types of crossing facilities and so it would appear that the elderly use crossing facilities with just as much success as other age groups.

**Figure 10: Elderly Pedestrian Casualties by Crossing Facility 2006-08**



## Contributory Factors

Police officers attending road traffic collisions are required to record contributory factors to help assess the reasons behind the collisions. In the North East region officers record contributory factors for 93% of the collisions involving elderly pedestrians 2006-2008.

Analysis of the contributory factors, for those collisions that have been coded, shows that 'pedestrian error' was recorded in 53% of the contributory factors. This shows that a significant number of elderly pedestrian casualties were injured as a direct result of their own actions in or around the carriageway.

**Figure 10: Top 10 Most Recorded Contributory Factors in Collisions Where an Elderly Pedestrian was Injured 2006-08**

1. Pedestrian failed to look properly
2. Driver failed to look properly
3. Pedestrian failed to judge vehicles path or speed

4. Driver careless/reckless/in a hurry
5. Pedestrian disability or illness, mental or physical
6. Pedestrian crossed road masked behind stationary vehicle
7. Pedestrian careless/reckless/in a hurry
8. Pedestrian impaired by alcohol
9. Poor turn or manoeuvre
10. Dazzling sun

## **Elderly Pedestrian Profiles**

Casualty profiling helps to identify and understand the category of people who are injured as elderly pedestrians around the region. Profiling is based upon the casualty postcodes recorded on the Stats 19 forms. These are run through a software package called Mosaic Public Sector, which places each into one of 11 'Groups' and 61 'Types' based on a variety of national data including the Census, British Crime Survey, and credit reports. This data is then compared to all postcodes in the region so that it is possible to see which profiles are over-represented in the data.

There are 5 types identified by the Mosaic software that have both significant casualty figures and are over represented in the data. The names given to these are:

**Type F39 – Older people living in crowded apartments in high density social housing**

**Type H45 – Older couples, mostly in small towns, who now own houses once rented from the council**

**Type C16 – Low density private estates, now with self reliant couples approaching retirement.**

**Type G43 – Older people, many in poor health from work in heavy industry, in low rise social housing**

**Type D23 – Owners of affordable terraces built to house 19<sup>th</sup> century heavy industrial workers**

Types F39, H45, and G43 are deprived areas to live in, where there is a poorer quality of life for elderly people. Types C16 and D23 are less deprived and better than average places to live.

Each Type has its own characteristics that can help road safety practitioners to understand the people who are injured as elderly pedestrians. These characteristics are as follows:

<b>Type F39</b>	<b>Type H45</b>	<b>Type C16</b>	<b>Type G43</b>	<b>Type D23</b>
Low income couples	Older working ages	Older working ages	Poorer older people	Full nest families
Pensioners	Manufacturing jobs	Grown up children	Some retired	Family focussed
Independent children	Low incomes	Grandchildren	Pension credit	Modest incomes
Low rise developments	Owner occupied terraces	Neat and tidy homes	Grown up children	Large terraces & semis
House proud	Older council housing	Churchgoers	Traditional gender roles	Industrial areas
Network of friends	Close to countryside	Mainstream tastes	Poor health	Drinking & smoking
Pension credit	Few social problems	Gentle exercise	Working class values	Football matches
Income support	Inactive lifestyles	Helpful neighbours	Football matches	TV watched regularly
Low car ownership	TV popular	Thrifty	Heavy TV viewing	Self sufficient

**Type F39** are receptive to Telemarketing, TV, and Red Top Newspapers. They are unreceptive to the Internet, Broadsheet Newspapers, and Magazines.

**Type H45** are receptive to TV, Red Top Newspapers, and Social Networking. They are unreceptive to the Internet and Broadsheet Newspapers.

**Type C16** are receptive to Right-of-centre Press. They are unreceptive to the Internet, TV, Posters, and Telemarketing.

**Type G43** are receptive to Telemarketing, TV, and Red Top Newspapers. They are unreceptive to the Internet, Broadsheet Newspapers, and Magazines.

**Type D23** are receptive to Tabloid Press. They are unreceptive to the Internet, Telephone advice lines, and Direct Mail.

*For further details regarding profiling please contact Daniel Barker*

## Headline Notes

- Elderly pedestrian casualties account for 15% of the regions pedestrian casualties BUT account for 42% of pedestrian fatalities.
- Tyne & Wear has the highest levels of elderly pedestrian casualties in the region however, other areas have higher levels per '000 population.
- 70% of elderly pedestrian casualties occur between 9am and 3pm.
- Elderly pedestrian are more at risk of injury during the winter months.
- The majority of elderly pedestrian casualties are attributed to errors made by the pedestrian themselves and NOT the driver.