



Executive Summary

- The non-wearing of seat belts is a particularly dangerous road user behaviour, which has been recognised internationally as a key contributory factor in road traffic collisions and injury severity (WHO, 2018).
- Research conducted by the RSA found that 28%* of car users killed between 2018-2022 were not wearing a seat belt. Further to this, RSA research found that 8% of car users seriously injured between 2017 and 2021 were not wearing a seat belt at the time of the collision. Therefore, tracking seat belt wearing rates is of critical importance.
- The RSA has been conducting seat belt wearing observational surveys since 2006. Wearing rates have improved substantially among all vehicle occupants since then and are at their highest level to date in 2022. Rates of usage have typically been lower among rear seat passengers when compared to drivers and front seat passengers.
- This trend was noticeable once again in the 2022 seat belt wearing observational survey, where the rates of seat belt usage were a few percentage points lower among rear seat passengers.
- 99% of drivers and front seat passengers were observed wearing a seat belt in 2022, but this dropped to 93% among rear seat passengers.

^{*} Figures are provisional and subject to change. Car users include users of private cars, taxis and hackneys. Figures are sourced from the RSA collision database and are current as of 3 July 2023.



Executive Summary

- In addition to an analysis of seat belt wearing by vehicle occupants, a breakdown by vehicle type, road type, gender, county, and time of week is also provided in this report.
- Very high seat belt wearing rates were observed among the various vehicle types (98%-99%).
- Lower rates of usage were witnessed among rear seat passengers on both urban and rural roads.
- 10% of male rear passengers were observed not wearing a seat belt.
- Lower rates of usage were witnessed among rear seat passengers during both weekdays and weekends.
- Very high rates of usage were witnessed across all counties where observations took place.



Report Overview

- Safety Performance Indicators
- Baseline Project
- Study Objectives
- Methodology
- Breakdown of Key Findings
- Summary of Key Results

Safety Performance Indicators (SPIs) in the Government Road Safety Strategy, 2021-2030



- This observational study on seat belt wearing has been conducted in the context of the SPI approach as part of the Government Road Safety Strategy.
- Use of performance indicators has been recommended in international guidance from global organisations, including ETSC and ITF/OECD.
- It is critical that SPIs have an evidence base and established relationship with safety performance (i.e., death and serious injury reduction).
- They reflect elements of the operational and safety context to better understand the road traffic system.
- In an Irish context, SPIs will be used to measure our performance in specific areas, known to contribute to death and serious injury reduction, to help us refine our policy interventions.
- An SPI has been developed as part of the Safe Road Use intervention area to determine the percentage of vehicle occupants observed using a seat belt.



EU Baseline Project

- The methodology for the Irish free speed survey is in line with recommendations from the EC, as part of the Baseline Project. Further details about this project can be found at https://www.baseline.vias.be/.
- A seat belt wearing SPI was included as part of this project, and a report has been produced.
- Baseline is an EU consortium of Member States created to assist authorities in the collection and harmonised reporting of SPIs co-ordinated by VIAS Institute in Belgium.
- The RSA have been participating in Baseline on behalf of Ireland since July 2020.
- The following research/methodology components are key elements of the Project:
 - Detailed methodological guidelines provided to Member States to ensure consistency of approach
 - Data collection methodologies considered best practice, developed by research experts at EC level, and overseen by 3 experienced road safety research institutes
 - Consistency in methodology across Europe to ensure benchmarking is possible
 - Consistency year-on-year ensures comparability of performance can be measured
- Trendline is the follow up project funded by the EU and will continue the work of Baseline until 2025.



Study Objectives

- The aim of this study was to gather observational data of seat belt wearing rates among vehicle occupants, both in the front and rear seats.
- This report will outline the methodology used for the 2022 seat belt wearing survey and will present the key findings from the study.



Methodology

- A manual observational study of seat belt wearing by drivers and passengers (front and rear) was conducted at 123 sites in June and July 2022. Given the time of year, it was not possible to conduct a student survey, as primary and secondary school summer holidays had begun at this time.
- The observational procedure involved trained observers standing at the roadside and observing the rate of seat belt usage among occupants of passenger cars and goods vehicles as they passed the site.
- Fieldwork was conducted by Nationwide Data Collection (NDC) on behalf of the RSA.
- *A nationally representative sample was used as part of this study, and observations took place in 23 counties.
- The 2022 study included 16,044 observations in total, and followed the methodology specified by Baseline.
- The approach adopted was broadly in line with the method used by the RSA in historic seat belt wearing surveys.
- All route types were included in the study, and observations were made on weekdays and weekends (daylight hours only).

^{*} Due to constraints in the sampling approach adopted, it was not possible to conduct observations in counties Carlow, Cavan and Sligo as part of the 2022 study.



Seat belt wearing by vehicle occupant

- Very high seat belt wearing rates were observed among drivers and front seat passengers (99%).
- However, the rate dropped to 93% for rear seat passengers.
- This finding is consistent with a trend seen in previous RSA seat belt wearing studies (see Appendix 1).

Table 1 – Seat belt wearing rates by vehicle occupant

| Vehicle Occupant | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|------------------|---------------------|-------------------------|-------------|
| Driver | 99% | 1% | 11,719 |
| Front Passenger | 99% | 1% | 3,221 |
| Rear Passenger | 93% | 7% | 1,104 |



Seat belt wearing by vehicle type

- Very high seat belt wearing rates were observed across the various vehicle types surveyed.
- 99% of occupants of both light goods vehicles (LGVs) and heavy goods vehicles (HGVs) were wearing seat belts.
- This rate falls slightly to 98% for car occupants.

Table 2 – Seat belt wearing rate by vehicle type

| Vehicle Type | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|--------------|---------------------|-------------------------|-------------|
| Cars | 98% | 2% | 14,386 |
| LGVs | 99% | 1% | 1,329 |
| HGVs | 99% | 1% | 329 |



Seat belt wearing by road type

■ Very high seat belt wearing rates were observed by vehicle occupants across the various road types surveyed. However, lower rates of usage were witnessed among rear seat passengers on both urban and rural roads.

Table 3 – Seat belt wearing rate by road type

| Road Type | Vehicle Occupant | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|----------------------------------|------------------|---------------------|-------------------------|-------------|
| | Driver | 99% | 1% | 5,526 |
| Urban Roads (50km/h and 60km/h) | Front Passenger | 99% | 1% | 1,573 |
| | Rear Passenger | 93% | 7% | 573 |
| Rural Roads (80km/h and 100km/h) | Driver | 99% | 1% | 5,012 |
| | Front Passenger | 98% | 2% | 1,387 |
| | Rear Passenger | 92% | 8% | 418 |
| | Driver | 99% | 1% | 1,181 |
| Motorways (120km/h) | Front Passenger | 100% | 0% | 261 |
| | Rear Passenger | 100% | 0% | 113 |



Seat belt wearing by gender

- Very high seat belt wearing rates were observed by vehicle occupants across both genders in general.
- However, 10% of male rear passengers were observed not wearing a seat belt.

Table 4 – Seat belt wearing rate by gender

| Gender | Vehicle Occupant | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|--------|------------------|---------------------|-------------------------|----------------|
| | Driver | 99% | 1% | 4,369 |
| Female | Front Passenger | 99% | 1% | 1,992 |
| | Rear Passenger | 96% | 4% | 655 |
| | Driver | 99% | 1% | 7,350 |
| Male | Front Passenger | 97% | 3% | 1,229 |
| | Rear Passenger | 90% | 10% | 449 |



Seat belt wearing by county

Table 5 – Seat belt wearing rate by county

| County | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|----------|---------------------|-------------------------|-------------|
| Clare | 98% | 2% | 252 |
| Cork | 98% | 2% | 1,028 |
| Donegal | 97% | 3% | 822 |
| Dublin | 98% | 2% | 4,028 |
| Galway | 99% | 1% | 2,136 |
| Kerry | 98% | 2% | 407 |
| Kildare | 99% | 1% | 256 |
| Kilkenny | 99% | 1% | 621 |
| Laois | 99% | 1% | 224 |
| Leitrim | 100% | 0% | 110 |
| Limerick | 99% | 1% | 1,026 |
| Longford | 98% | 2% | 539 |



Seat belt wearing by county

Table 5 – Seat belt wearing rate by county

| County | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|-----------|---------------------|-------------------------|-------------|
| Louth | 98% | 2% | 224 |
| Mayo | 97% | 3% | 312 |
| Meath | 99% | 1% | 674 |
| Monaghan | 98% | 2% | 275 |
| Offaly | 99% | 1% | 236 |
| Roscommon | 100% | 0% | 50 |
| Tipperary | 98% | 2% | 1,075 |
| Waterford | 99% | 1% | 427 |
| Westmeath | 98% | 2% | 752 |
| Wexford | 99% | 1% | 362 |
| Wicklow | 99% | 1% | 208 |



Seat belt wearing by time of week

■ Very high seat belt wearing rates were observed by vehicle occupants during weekdays and at weekends. However, once again, lower rates of usage were witnessed among rear seat passengers during both time periods.

Table 6 – Seat belt wearing rate by time of week

| Time of Week | Vehicle Occupant | % Wearing Seat Belt | % Not Wearing Seat Belt | Sample Size |
|-------------------------------|------------------|---------------------|-------------------------|----------------|
| Weekday (Monday to Friday) | Driver | 99% | 1% | 10,572 |
| | Front Passenger | 99% | 1% | 2,742 |
| | Rear Passenger | 93% | 7% | 893 |
| | Driver | 99% | 1% | 1,147 |
| Weekend (Saturday and Sunday) | Front Passenger | 98% | 2% | 479 |
| | Rear Passenger | 95% | 5% | 211 |



Key Results

- Very high seat belt wearing rates were observed among drivers and front seat passengers (99%) in 2022, and these represent the highest seat belt wearing rates since this survey was first conducted by the RSA in 2006.
- However, the rate dropped by a few percentage points for rear seat passengers (93%), consistent with findings from previous RSA seat belt wearing studies. Male rear passengers in particular had the lowest seat belt wearing rates (90%).
- Very high seat belt wearing rates were observed across the three vehicle types surveyed.
- Lower rates of seat belt usage were observed among rear seat passengers on both urban and rural roads.
- Lower rates of compliance were also witnessed among rear seat passengers both during weekdays and at weekends.
- Very high rates of compliance were witnessed across the counties where observations took place.



-RSA



Appendix 1 – Historic Seat Belt Wearing Rates

Table 7 – Historic seat belt wearing rates by vehicle occupant

| | | _ | |
|------|---------|------------------|-----------------|
| Year | Drivers | Front Passengers | Rear Passengers |
| 2006 | | *86% | 63% |
| 2007 | | *88% | 84% |
| 2008 | 90% | 90% | 78% |
| 2009 | 90% | 89% | 79% |
| 2011 | 94% | 94% | 90% |
| 2012 | 93% | 90% | 89% |
| 2013 | 94% | 93% | 89% |
| 2014 | 92% | 93% | 88% |
| 2015 | 94% | 94% | 81% |
| 2016 | 92% | 94% | 74% |
| 2017 | 96% | 96% | 83% |
| 2018 | 94% | 95% | 89% |
| 2021 | 99% | 98% | 93% |
| 2022 | 99% | 99% | 93% |

^{*} In the 2006 and 2007 studies, percentages for drivers and front passengers were expressed in terms of front seat occupants.