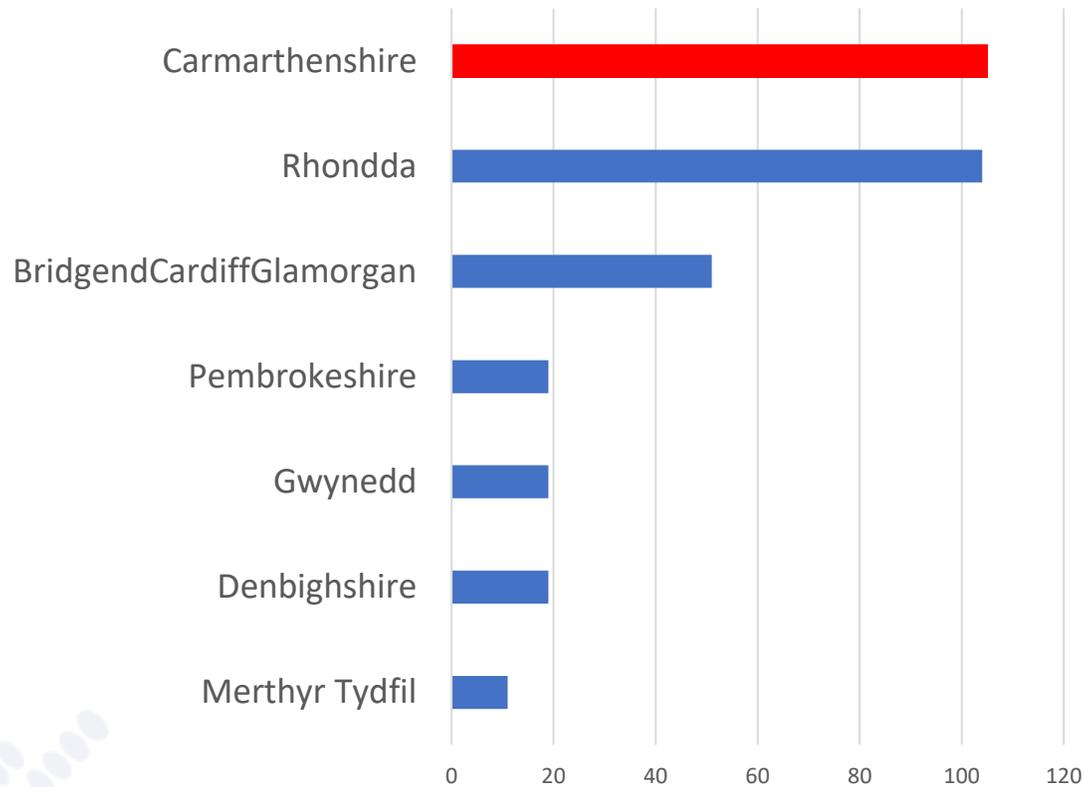


# Protecting vulnerable residents in Carmarthenshire from scam phone calls

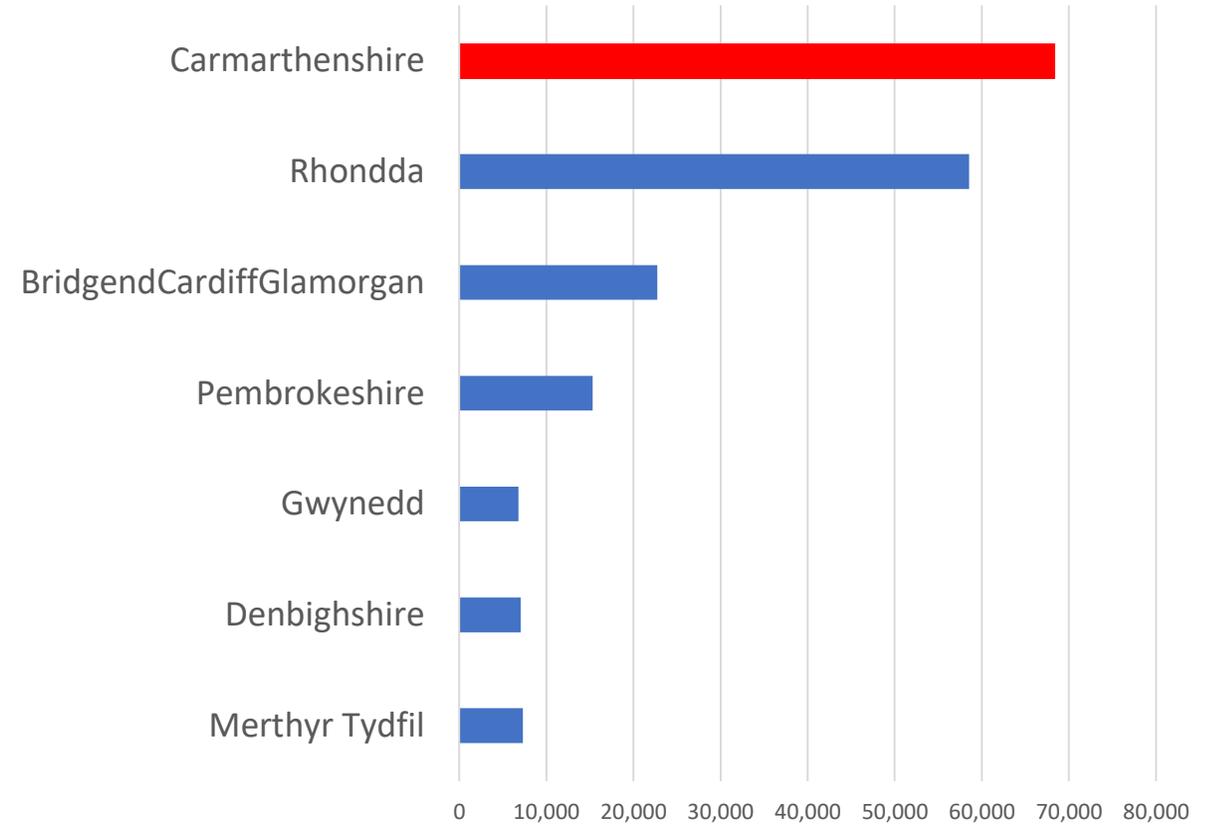


# trueCall units installed across Wales

## trueCall units installed



## Nuisance calls blocked



# Protecting Vulnerable Adults From Scam Phone Calls

Since 2013 Carmarthenshire Trading Standards have installed 106 call blockers to protect older and vulnerable people. So far 69,853 nuisance calls have been blocked, and an estimated 79 scams have been prevented.



x2

Residents were receiving 36 nuisance calls per month - twice the national average



43%

of all calls received were nuisance calls



99%

of nuisance calls were blocked by trueCall call blocking technology

Costs

Benefits

£918,617 savings

1:56

## Cost-Benefit analysis

It is estimated that the project has already prevented 79 scams, and made savings of £280,756. Over the 5 year life of these units they will have blocked 218,215 nuisance calls (of which 43,896 will have been scam phone calls), prevented 259 scams, saved vulnerable households £482,229 and led to a reduction of £436,388 in NHS and health & social care costs. This will be a total saving of £918,617 for a project cost of £16,430 – a payback of 56 times the cost.

## Comments from those protected by the trueCall call blockers



This made a huge difference and enable my mother to continue to live in her own home for longer



My mother no longer gets anxious and agitated. I cannot impress on you the positive impact this has made.



Thanks for making my phone my friend again!



**trueCall**  
STOPS NUISANCE CALLS

---

# How do we calculate the costs and the benefits?



## Cost/Benefit analysis

---

We need to calculate the cost of the project and the benefits of the project, then see whether the benefits are greater than the costs

- Costs are easy to calculate
- Benefits are more difficult ....

The Benefits are the savings made because of the project – ie the costs that would have been incurred if the project hadn't happened

# What are the costs?

---



The cost of each trueCall unit is £155, including 5 years warranty, and 5 years use of the Internet Control Panel

# How do we calculate the benefits?

---

Number of nuisance calls received ?

X X

Proportion of nuisance calls that are scams ?

X X

Proportion of scam calls blocked by trueCall ?

X X

Likelihood of falling for a scam phone call ?

X X

Average amount lost to the scam ?

## Number of nuisance calls received

---

- The trueCall units supplied by Carmarthenshire Trading Standards are receiving an average of 36 nuisance calls per month
- Ofcom say the average across the UK is 18 per month, so this is twice as many nuisance calls as the average household receives
- 70,203 nuisance calls were received by these residents since 2013
- Over the five year life of these units – at the current rate – 229,700 nuisance and scam calls will have been received

# How do we calculate the benefits?

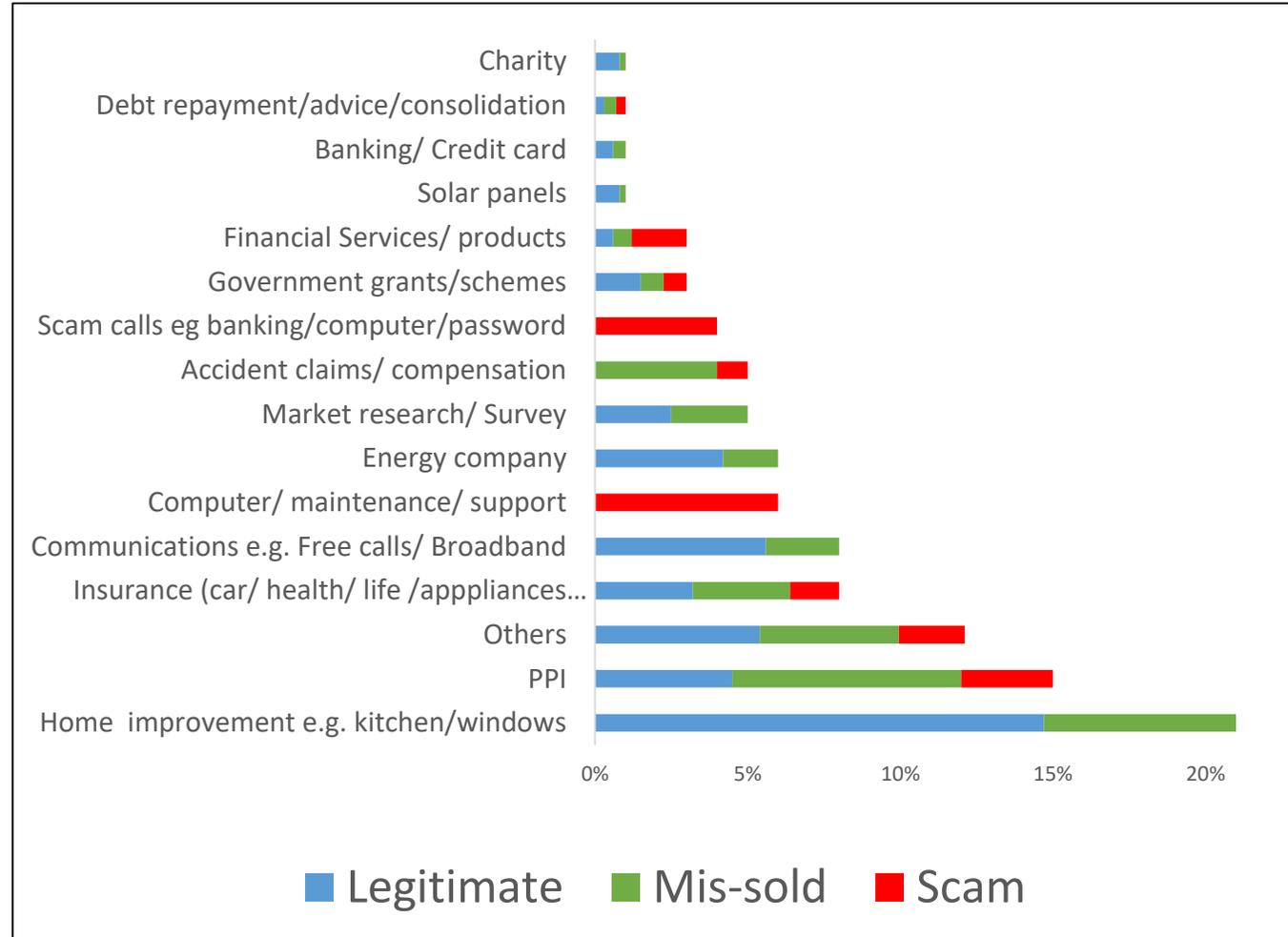
---

Number of nuisance calls received	<b>229,700</b>
X	X
Proportion of nuisance calls that are scams	?
X	X
Proportion of scam calls blocked by trueCall	?
X	X
Likelihood of falling for a scam phone call	?
X	X
Average amount lost to the scam	?

# How many nuisance calls are scam calls?

- Analysis of Ofcom data suggests that across all call types **21%** of nuisance calls are likely to be scams
- A Scottish Government report estimates that **30%** of calls received by the most vulnerable are scam calls
- A BT news release suggests that a minimum of **20%** of nuisance calls are scams
- In the USA the Federal Communications Commission estimates that **47%** of nuisance calls are illegal

We use **21%** as our estimate



# How do we calculate the benefits?

---

Number of nuisance calls received	229,700
X	X
Proportion of nuisance calls that are scams	<b>21%</b>
X	X
Proportion of scam calls blocked by trueCall	?
X	X
Likelihood of falling for a scam phone call	?
X	X
Average amount lost to the scam	?

## Data from various independent sources tested

While the trueCall has been shown to block 95%+ of nuisance calls, we know that scam calls are more difficult to block, so three studies were carried out:

The National Fraud Intelligence Bureau provided a list of 100 scam calling numbers - these had made 311 calls to trueCall customers. Of these 311 calls the caller had only spoken to the trueCall user on 27 occasions – ie trueCall prevented **91%** of scam calls getting through.



Lincolnshire Police published a list of 29 phone numbers that were making scam calls – these had made 460 calls to trueCall users. Of these 460 calls the caller had only spoken to the trueCall user on 4 occasions – ie trueCall prevented **99%** of scam calls getting through.



Lincolnshire  
Police

Sussex Police identified 2 calling numbers that appeared to be carrying out the Microsoft scam. These two numbers made 76 calls to trueCall customers across the country, but trueCall stopped them all getting through – ie **100%** of them were blocked.



Sussex Police

We use the lower figure of **91%** as our estimate

# How do we calculate the benefits?

Number of nuisance calls received	229,700
X	X
Proportion of nuisance calls that are scams	21%
X	X
Proportion of scam calls blocked by trueCall	<b>91%</b>
X	X
Likelihood of falling for a scam phone call	?
X	X
Average amount lost to the scam	?

# Likelihood of falling for a scam phone call

---

- Some types of scam are more effective than others – at the top end of the range Microsoft have reported that **17%** of Microsoft scam calls resulted in a loss of money
- Citizens Advice said that of those targeted by fraudsters, just over 1 in 8 (**14%**) said they had fallen for the most recent attempt to scam them, and 38% lost money – ie 5% of people surveyed fell for the most recent attempt to scam them, and lost money.
- The report 'Effectiveness of actions to reduce harm from nuisance calls in Scotland' commissioned by the Scottish Government (March 2018) estimates that the proportion of scam calls leading to a loss is **4.5%** for the most vulnerable reducing to **0.4%** for everyone else.

For our model we take the Ofcom figures and assume that 1 in 100 Microsoft scam/computer/password phone calls result in a loss of money (we have scaled down the Microsoft figures considerably), and 1 in 500 of all other scam phone calls result in a loss of money

Multiplying this out, we calculate that just 0.59% of scam calls are effective – ie only one in 169 scam phone calls to a vulnerable person leads to a financial loss

This seems to be a reasonable estimate, particularly since those who have been given a trueCall unit already been identified as being particularly at risk from scams

**We use 0.59% as our estimate**

# How do we calculate the benefits?

---

Number of nuisance calls received	229,700
x	x
Proportion of nuisance calls that are scams	21%
x	x
Proportion of scam calls blocked by trueCall	91%
x	x
Likelihood of falling for a scam phone call	<b>0.59%</b>
x	x
Average amount lost to the scam	?

# What are the costs of a successful scam?

---

- The money lost to the scam by the victim
- Social care costs
- Health service costs
- Police time
- Carers time
- etc, etc

# Money lost to a scam

---

- The National Trading Standards Scams Team estimates that the average loss to a scam is **£1,862**
- The National Audit Office estimates the average financial loss per victim of a mass marketing fraud, aged between 75 and 79 years to be **£4,500**
- In 2017 Citizens Advice handled 3.6m scam cases that had a total detriment of £10.9bn – an average loss of **£3,000**
- The average loss to a scam reported to Sussex Police is **£20,000**
- The Financial Conduct Authority says that most pension scams start with a cold call, and the average loss is **£91,000**

We use the lowest figure of **£1,862** for the average loss

## Health & social care costs

---

It is accepted that being the victim of a crime often causes physical and mental health problems – research in the UK and USA says:

- 40% of scam victims report a change to their quality of life as a result of the crime
- Scam victims are over twice as likely to have died or moved into full time care within 2 years of their loss
- 29% of scam victims suffered a major depressive episode in the 20 months following the fraud (with some experiencing suicidal thoughts) compared with only 2% of non-victims
- In addition, 45% suffered a generalised anxiety disorder, compared with 15% of non-victims

## Social care costs

---

The Personal Social Services Research Unit identifies 5 levels of social care need, and the costs of providing this care.

	Very low	Low	Medium	High	Very high
Social care cost PA	£4,264	£10,764	£17,004	£44,044	£51,376

We assume that 27% of older vulnerable people who are scammed move up one level of social care for one year. This equates to an additional social care cost of between £6,240 and £27,040 – we use with the lowest level in our calculations

**We calculate the average health and social care cost to be £1,685**

(In a recent report, Age UK said that they believed that this calculation was ‘robust and conservative’)

# How do we calculate the benefits?

Number of nuisance calls received	229,700
x	x
Proportion of nuisance calls that are scams	21%
x	x
Proportion of scam calls blocked by trueCall	91%
x	x
Likelihood of falling for a scam phone call	0.59%
x	x
Average amount lost to the scam	<b>£1,862 + £1,685 = £3,547</b>

## Costs we haven't included

---

There are a range of other costs we haven't included in our figures –if these were included the benefits would be significantly higher:

- Physical and emotional harm to the victim
- Reduction in Police time recording and investigating scams
- Health service costs
- Allowing people to remain living in their own homes for longer (saving the cost of residential care)
- Cost for carers to resolve issues caused by nuisance calls
- People who lose their money to scams will rely on public services more

# Physical and emotional harm to the victim

---

The Home Office uses the concept of a 'QALY' to evaluate physical and emotional injuries resulting from being a victim of a crime.

This approach finds the negative percentage impact on a person's quality of life from different injuries. For example, if a person breaks their rib they are judged to suffer approximately a 15% reduction in their quality of life whilst they are recovering

Using the Home Office methodology we estimate that the average physical and emotional harm to a scam victim is **£2,146**.

It is no surprise that this is a higher than the amount actually lost.

## Reduction in Police time recording and investigating the scam

---

The Home Office report estimates that the police cost associated with recording and investigating a fraud is £60

The police tell us that the real cost is much higher



## Other savings for the public purse – Health service

---

- Addressing the mental health issues caused when someone is scammed – depression, anxiety, etc
- Addressing the physical health issues caused when someone is scammed
- Reduction in risk of trips and falls and distraction accidents (because the phone rings much less often)

## Other savings for the public purse - other

---

- Allowing people to remain living in their own homes for longer (saving the cost of residential care)
- Cost for carers to resolve issues caused by nuisance calls
- People who lose their money to scams will rely on public services more - Citizens Advice say that nearly 9% of scam victims went into debt as a result, 13% reported that they lost some or all of their savings, and 7% did not have enough to pay for essentials such as heating or food.

## Scam calls - how much saved in Carmarthenshire?

---

Since 2013 Carmarthenshire Trading Standards have installed 106 trueCall units that have received 70,203 nuisance calls

Base on this we can estimate that over their five year life the trueCall units will have:

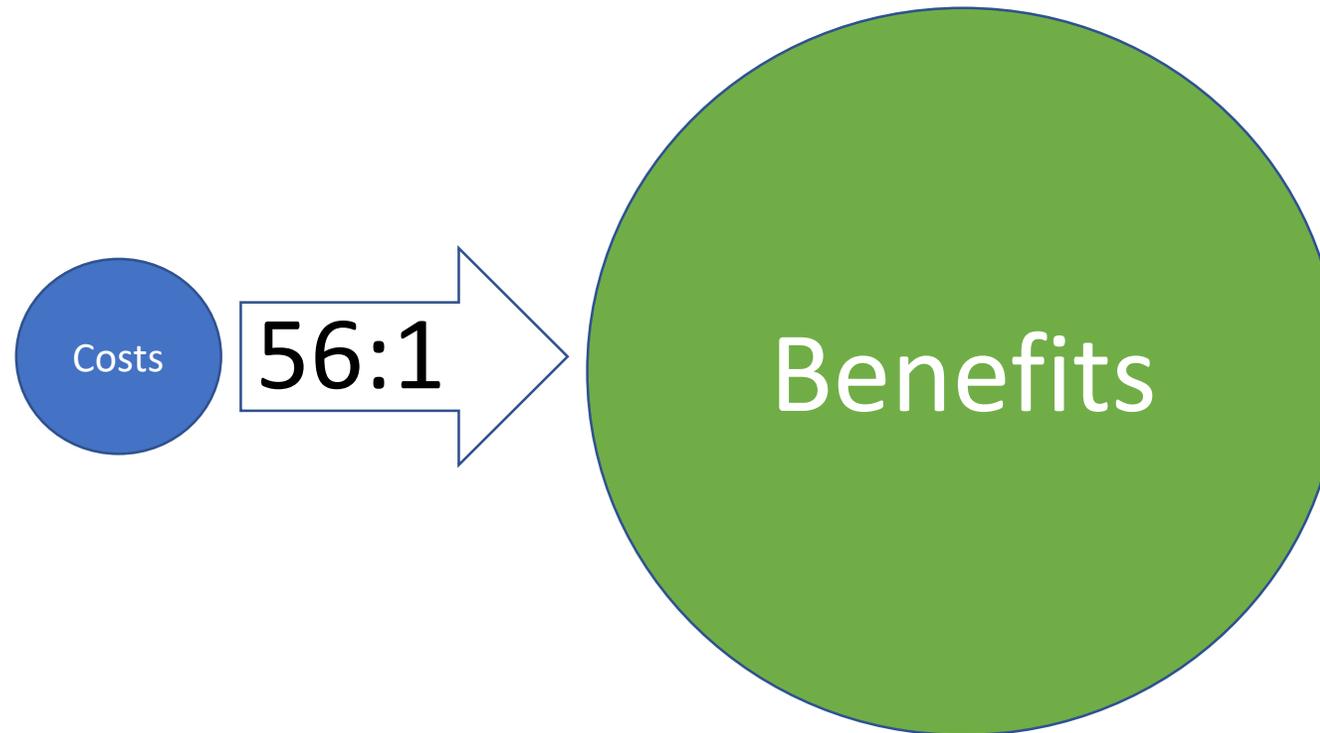
- Blocked 229,700 nuisance phone calls of which 43,896 would have been scam calls
- Prevented 259 scams being successful
- Saved vulnerable Carmarthenshire households £482,229
- Led to a £436,388 reduction in social care and other costs for the public purse

**Total estimated savings of £918,617**

# Assuming that each unit stays in use for 5 years

---

The estimated total savings of £918,617 will be 56 times the cost of the project



External consultants for the National Trading Standards Scams Team estimated that they payback for a call blocker fitted for a high risk person is £9,500 – ie a 61 times payback.

## How we calculate the stats

We have to estimate each of these figures, but because detailed data isn't available some of these estimates will be more accurate than others.

When we estimate we cross check data from multiple sources, and in each case we choose conservative estimates. This means that the benefits are most likely to be higher than the figures we give.

Metric	Accuracy of estimate
Number of nuisance calls received	Very high
Proportion of nuisance calls that are scams	High
Proportion of scam calls blocked	High
Likelihood of falling for a scam phone call	Medium/low
Average amount lost to the scam	Medium

# Calculations

We calculate the cost benefit statistics using call statistics from the units that have been installed, and estimates of nuisance call levels, etc. The calculations are below:

## Call statistics

trueCall units installed	106
	70,203
Nuisance/scam calls received	69,853
Nuisance/scam calls blocked	43%
% of incoming calls that are nuisance	36
Nuisance calls received per month	59,124
Number of unit/days of protection	25%

## Estimates

Scam proportion	21%
% scams blocked	91%
Scam success rate	0.59%
trueCall unit cost	£155
Amount lost by scam victim	£1,862
Social cost of a scam	£1,685

## Calculations

70,203 nuisance calls have been received by the 106 trueCall units that have been installed  
If 21% of all nuisance calls are scam calls, then 14,743 scam calls were received  
If trueCall blocks 91% of scam calls, then 13,416 scam calls were blocked  
If 0.59% of scam phone calls (one in 169) are successful, then 79 scams were prevented  
If the average loss to a scam victim is £1,862 then the victim savings are £147,383  
If the average loss to the public purse for a scam is £1,685 then social care savings are £133,373  
Total savings are therefore £280,756

Each trueCall unit costs £155, so total equipment cost is £16,430  
The investment of £16,430 has returned savings of £280,756 - a return of 17:1

The 106 trueCall units have had in total 59,124 days use

Over 5 years:

- these units will have 193,450 days use
- these units will receive 229,700 nuisance calls
- these units will block 43,896 scam calls
- these units will prevent 259 scams
- savings for the public will be £482,229
- savings for in social care will be £436,388
- total savings will be £918,617
- the investment of £16,430 will return savings of £918,617 - a return of 56:1

## More information

---

For more information about these calculations  
please contact Steve Smith of trueCall Ltd

[SteveSmith@trueCall.co.uk](mailto:SteveSmith@trueCall.co.uk)

0208 408 8900 / 07768 637141