Road Safety Inquiry: Call for Evidence

RoSPA's Response to the Commons Transport Committee's Call for Evidence

Date: April 2019

Response to Commons Transport Committee's Call for Evidence, Road Safety Inquiry

Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Commons Transport Committee's call for evidence as part of its road safety inquiry. It has been produced following consultation with RoSPA's National Road Safety Committee.

The Transport Committee is concerned that progress in road casualty reduction has began to plateau and have therefore launched an inquiry to scrutinise the Government's approach to road safety. The inquiry aims to investigate what changes would be most effective at reducing both the number and severity of road traffic accidents.

Response to Commons Transport Committee's Call for Evidence, Road Safety Inquiry

Question 1
How effective is the Government's current approach to road safety?

RoSPA Response

The long term trend in road casualties in reported road accidents was broadly level between 1979 and 1998, allowing for natural variation in the number of casualties. Between 1998 and 2010 the general trend in road casualties was downward.

However, the number of road deaths has levelled out since 2010. Since then, most of the annual changes are explained by one-off causes (for instance, the snow in 2010) or natural variation. The number of road deaths in Great Britain in 2017 (1,793) was almost the same as in 2016 (1,792) and had not changed compared to the 2010-14 average (1,799).

These are road casualties reported to the police and do not include tens of thousands of people who are injured in unreported crashes every year. Although virtually all fatal road crashes are reported, a considerable proportion of non-fatal casualties are not, even when those involved require medical or hospital treatment.

Scotland's Road Safety Framework to 2020 contains a number of national targets for casualty reductions, set from the 2005-2009 baseline:

- A 40% reduction in the number of people killed in road traffic accidents by 2020.
    - In 2017, there were 146 people killed in Scotland, a 50% reduction since baseline.
- A 55% reduction in the number of people seriously injured in road traffic accidents by 2020.
    - In 2017, there was 1,580 people seriously injured, a 39% reduction since baseline.
- A 55% reduction in the number of children killed in road traffic accidents by 2020.
    - Between 2015 and 2016, there were 6 children per year killed, a reduction of 61% since baseline.
- A 65% reduction in the number of children seriously injured in road traffic accidents by 2020.
    - In 2017. 152 children were seriously injured, a 53% reduction since baseline.

Casualty reduction targets have also been set in Wales, compared to the 2004-2008 average:

- A 40% reduction in the number of people killed or seriously injured in road traffic accidents by 2020.
    - In 2017, there was a 24.3% reduction in the number of people killed or seriously injured.
- A 25% reduction in the number of motorcyclists killed or seriously injured in road traffic accidents by 2020.
    - In 2017, there was a 1.9% reduction in motorcyclists killed.
- A 40% reduction in the number of young people aged 16-24 in road traffic accidents by 2020.
    - In 2017, there was a 40.7% reduction in the number of young people killed or seriously injured in road traffic accidents.

Around 90% of road crashes involve some element of human error. Although educating road users can reduce the number of road crashes that occur, human error cannot be eradicated. Therefore, road users will still sometimes make mistakes that can lead to collisions. One way in which the number of road users killed or seriously injured can be reduced is by adopting a Safe System approach, so that crashes are less likely and when they do occur, it is less likely that the road users involved will be killed or seriously injured.

Safe System is the generic term for approaches such as 'Vision Zero', 'Sustainable Safety' and 'Towards Zero'. It is based primarily on Vision Zero, recognising that human beings' lives and health should never be compromised by their need to travel. Vision Zero states that any fatal or serious injuries that occur within the road system are unacceptable. The Scottish Government[1], Highways England[2] and Transport for London (TfL)[3] have, or are, introducing the Safe System principles in their strategies. As this vision will take much time to achieve, interim targets are set, for example, Scotland's Road Safety Framework includes a target to achieve a 40% reduction in the number of people killed in road traffic accidents by 2020, from a baseline of the 2005-09 average. Highways England's Delivery Plan includes the "goal of bringing the number of people killed or injured on the network as close as possible to zero by 2040" TfL's aim is for deaths and serious injuries from road collisions to be eliminated by 2041.

RoSPA recommend the further adoption of the safe system approach throughout Great Britain, but believe that there needs to be stronger guidance on this. Vision Zero is discussed a lot, but outside of London, few Highways Authorities have adopted local targets.

RoSPA welcomes the DfT approach of consulting road safety practitioners and the wider public to seek their views on how vulnerable road users can be further protected, as illustrated by the recent 'Death by dangerous driving' and 'Cycling and Walking Investment Strategy' consultations. The recommendations coming from the latter are a welcome first step into protecting those walking and cycling.

The last British Road Safety Statement was in 2015 and we await a new statement. RoSPA would urge the DfT to adopt national targets for England as has been the case in Wales, Scotland and Northern Ireland, all of which have seen good progress unlike England where casualty reduction rates have stalled.

Question 2
Are there any areas where the Government's current approach to road safety could be improved?

RoSPA Response

There has been a reduction in road safety provision, in terms of roads police officers and road safety officers. The National Audit Office estimated that in real terms, there was a 37% reduction in government funding between 2010/11 and 2015/16[4]. There has also been a 23% reduction in the number of full-time equivalent traffic police officers. However, not all forces have been affected by cuts equally, cuts range from 1% in Cheshire to 76% in Devon and Cornwall[5].

The style of policing has also evolved, with greater emphasis on targeted enforcement using technology. An effect of this is that the general deterrence of visible policing is lost, with some road users left with the knowledge that only some forms of road traffic offences are monitored and other behaviour being less effectively enforced than previously.

Research suggests that increasing levels of traffic policing reduces the number of road accidents and traffic violations. Stationary and highly visible policing appears to be the most effective method of reducing violations and accidents. However, sustained police presence is required to produce such large effects[6].

RoSPA believe that the reduction in roads policing has been detrimental to road safety, and that targeted enforcement is vital. The Government should consider the road safety implications of the reductions in funding

for Police services around the country, and seek to ensure that sufficient resources are available for road policing.

Question 3
What interventions would be most effective at reducing the number and severity of road traffic accidents?

RoSPA Response

20mph limits and zones

Speed significantly increases injury severity in collisions, making serious or fatal injuries more likely. Research has shown that the risk of death for pedestrians struck by cars increases at higher impact speeds. The most recent modern estimates of the risk to pedestrians when struck by cars at different speeds are outlined in RoSPA's 20mph Zones and Speed Limits Factsheet, which shows a fatality risk of 1.5% at 20 mph versus 8% at 30mph.

However, it must be noted that 20mph limits are not suitable in all circumstances and should not be seen as a solution to all speed problems. Where 20mph speed limits are introduced, this must be supported with education and publicity to ensure driver compliance, together with engineering measures, if 20mph does not feel the appropriate speed. Without this little will change and the perception that the roads are too dangerous will continue. There is strong public support for 20mph limits - 72% of respondents in the British social attitudes survey are in favour or strongly in favour of 20mph speed limits in residential streets. However, this will soon be lost if they are nationally introduced and largely ignored by motorists.

20mph zones are designed to be "self-enforcing" by means of traffic calming measures or safety cameras that are introduced along with the change in the speed limit. Where 20mph speed limits are introduced, Highway Authorities should monitor their effectiveness to ensure that they are managing vehicle speed at or below 20mph. If this is not the case a package of measures needs to be introduced to ensure driver compliance.

RoSPA believes that 20mph limits are most appropriate for roads where average speeds are already low, and the current guidance suggests below 24mph. Following the publication of the Atkins report, RoSPA would like to see the guidance updated on when it would be expected that a Local Authority should consider physical traffic calming to manage speeds.

Greater police enforcement of drink drive/mobile phone offences

RoSPA also believe that greater police enforcement or drink drive and mobile phone legislation could be effective at reducing the number and severity of road traffic accidents.

The maximum blood alcohol limit in England, Wales and Northern Ireland is 80mg of alcohol per 100ml of blood (80mg/100 ml). In Scotland, it was lowered to 50mg/100ml blood on 5 December 2014. In Northern Ireland, the limit is the same as in England and Wales, but there are plans to lower it.

The 80mg/100ml limit was based on evidence that the likelihood of a road accident rises sharply at and above that level. However, the evidence also showed that most drivers are impaired and their risk increases below this limit. Drivers with a blood alcohol level of between 50mg and 80 mg are 2 – 2.5 times more likely to be involved in an accident than drivers with no alcohol, and up to 6 times more likely to be involved in a fatal crash[7]. Therefore, RoSPA would like to see the drink drive limit reduced to 50mg per 100ml of blood in line with Scotland for England and Wales.

A minority of drivers continue to use hand held mobile phones despite an increase in the penalty for doing so which is worrying because drivers who use a mobile phone, whether hand-held or hands-free:

- are much less aware of what's happening on the road around them
- fail to see road signs
- fail to maintain proper lane position and steady speed
- are more likely to 'tailgate' the vehicle in front
- react more slowly, take longer to brake and longer to stop
- are more likely to enter unsafe gaps in traffic and;
- feel more stressed and frustrated.

RoSPA would like to see increased publicity and enforcement to deter drivers and an extension in the law to include hands free mobile phones because using a hands-free phone while driving does not significantly reduce the risks. This is because the problems are caused mainly by the mental distraction and divided attention of taking part in a phone conversation at the same time as driving.

Although the government accepts the evidence that using a hands-free phone while driving distracts the driver and increases the risk of an accident, they do not think a hands-free ban would be enforceable. RoSPA disagrees and would like a change in legislation as soon as is practicable.

Infotainment

The dangers associated with driver distraction due to the use of mobile phones is widely documented, but there is a lack of research associated with in car infotainment systems and whether they do or do not pose a danger as a result of driver distraction and cognitive multi-tasking.

Infotainment systems can allow a driver to perform a number of tasks, such as standard radio and CD players to listen to music, hands-free phone connections to make phone calls, vehicle voice commands and other types of interactive audio or video. Some systems allow the driver to listen to incoming and outgoing text messages and access internet or smartphone enabled content such as traffic conditions, sports results and weather forecasts. Many of these systems involve a complex multimodal interaction to perform a task, often via a large visual touch screen.

It is clear that the problem of driver distraction caused by in-vehicle technology has moved far beyond the use of hand-held mobile phones to make or receive calls or to send or read text messages as covered by the 2003 'Road Vehicles (Construction and Use Amendment no.4) Regulations'.

Therefore, RoSPA would like to see independent research carried out to evaluate whether infotainment systems and large screen digital touch screens have a negative safety impact on a drivers ability to spot hazards, observational ability and general road awareness.

RoSPA believes that the law, and the Highway Code, governing in-vehicle driver distraction needs to be reviewed and updated if research indicates that infotainment systems have a negative safety impact.

Cycling and Walking

The Department for Transport has published guidance documents to help local authorities design safe road infrastructure, including "Manual for Streets 2". However, Highway Authorities and traffic engineers follow a mass of unclear and conflicting design guidance on cycle provision, and some schemes, such as 'Light Segregation' cycle schemes are not covered by the Traffic Signs Regulations and General Directions 2016.

RoSPA believes that a national design standard should be developed to ensure that all schemes are delivered to a set safety standard. Without this there is a danger that schemes will be implemented which at best have no safety benefits and at worst create danger to vulnerable road users. Post–implementation monitoring should take place in all cases to allow for adjustments to mitigate unforeseen issues during the design stage.

This lack of consistency also applies to other areas and we believe that common standard guidance should apply to all road and junction types, highway and traffic schemes, new developments and planned highway maintenance works.

Cycle and walking routes should be continuous, direct and join up residential, commercial and schools. Cyclists should not have to cycle unprotected in busy and fast moving traffic, and pedestrians need safe and well-designed footways and crossing facilities. A new cycle route manual should be produced which builds on current technical advice that cycle routes need to be:

- Direct – shortest, quickest route to minimise delay. Continual starting and stopping to cross roads is both frustrating and tiring
- Safe – The route must be both statistically safe and feel safe
- Coherent – Joined up and easy to follow
- Attractive – Enhance the existing streetscape
- Comfortable – Clean, smooth surface in all weathers
- Adaptable - Allow future upgrades to accommodate an increase in use.

Three quarters of cycling collisions take place at junctions, while research by the University of Westminster found that regular cyclists have 25 near misses at junctions each year[8]. 'Look and failed to see' a cyclist has been widely reported with many local and national campaigns undertaken to highlight the dangers to two wheel riders. However, despite this, junctions remain a key risk location for both cyclists and pedestrians. Therefore, RoSPA would like to see new rules on junction priority developed to improve safety and convenience for both pedestrians and cyclists at junctions with or without traffic signals.

Many continental countries require traffic to give way to cyclists and pedestrians going straight ahead at a junction, even where the turning traffic has a green traffic light. British Cycling's 'Turning the Corner'[15] campaign has called for something similar in the UK and RoSPA believes that this should be piloted, initially, by allowing pilots in specific locations. Currently, for a cycle lane or path to have priority when it crosses a junction, there must be a speed hump which is costly and unpopular; implementing the Turning the Corner' campaign would avoid this requirement.

Badly maintained footways increase the likelihood of trips, whilst hitting a pothole can result in riders being thrown from their bicycle. This risk is faced by motorcyclists, too.

Potholes are becoming an ever-greater problem, with a major cycling event apparently having been cancelled due to the number of potholes on the route. Poor road surfaces also create a major tripping hazard for pedestrians.

Although considerable funding is provided to local authorities, pothole patching is at best an inefficient, poor value and temporary solution. It is essential that highly used footways and cycle routes are maintained to a high standard and are regularly inspected. We believe that proper re-surfacing programmes of whole roads or stretches of roads, are a more cost-effective approach than repairing individual pot holes.

Pedestrian training

Pedestrian casualties increase as children grow older and become more independent as pedestrians. Road safety education and training for children at Key Stages 1 and 2 should be conducted in real-road environments, rather than sessions undertaken solely in a classroom or playground. It should also cover modern-day scenarios, such as distraction by mobile phones or MP3 players while walking, and crossing between parked vehicles.

Pedestrian training could usefully be seen as the beginning of a lifelong cycle of road safety training that also encompasses cycle training, pre-driver education, the learning-to-drive process and "refresher" or further driver training throughout life.

Unfortunately, a recent RoSPA commissioned YouGov survey (February 2019) found that:

- 49% of parents of children aged 6-11 in England say their child has not received any form of pedestrian training in the last 12 months
- 61% said they would like their child to receive more practical pedestrian training
- 66% thought that there should be more emphasis on the importance of practical pedestrian training in schools/ places of education

RoSPA believe that there should be a national pedestrian training scheme available to schools.

To support public health priorities, such as obesity and air pollution, it is important that road safety initiatives promote active travel choices like walking and cycling. With the peak times in the number of child pedestrians who are killed or seriously injured being the traditional "school-run" periods of 8-9am and 3-4pm, schemes that seek to teach road safety skills and reduce car journeys have the potential to make a particularly useful contribution.

Transport for London STARS and Modeshift STARS (outside of London) are examples of schemes that support schools in both teaching road safety and in encouraging families to make journeys by foot, bicycle or scooter, helping to reduce congestion at the school gates and providing a safer and cleaner environment. Transport for London's Young Travel Ambassadors scheme, a peer-led behaviour change programme for secondary schools, also encourages walking and cycling, in addition to the responsible use of public transport. Since 2013, three quarters of participants agreed or strongly agreed that they have become more aware of their safety on the roads.

Road safety programmes that combine education and changes to the road environment in an integrated package show some potential but more rigorous research is required.

RoSPA also support the "learning about safety by experiencing risk" approach to safety education, giving children the opportunity to develop their skills through practical activities. Visits to permanent practical safety education centres or participation in interactive safety schemes, can increase children's awareness of key risks. Research into the impact of children's visits to such schemes found that children who had experienced safety education improved their recognition of a variety of risk hazards.

RoSPA believes that the contribution made by PSHE education to students' health, safety and wellbeing should be reinforced by a strong statutory curriculum.

Driving for work

About a third of road accidents involve someone who is at work at the time, so further action on work-related road risk could bring major benefits. Employers need help to understand their legal duty to manage the risks their staff face and create when using the road for work, and to find ways to reduce at-work driving.

Work related road safety is not managed in the same way as general health and safety to the extent that it should be. In smaller organisations –it is viewed as being a marginal activity in a fleet management programme rather than an activity that should be embedded strategically at board level as part of the occupational health and safety governance structure. RoSPA has evidence of good practice especially with larger organisations who take this issue very seriously through its awards programme. However, this is not universal and progress made since the review has been slow and there needs much greater leadership from national government, especially as approximately a third of all road casualties are work related. The responsibilities of employers needs to be clearly stated in the forthcoming Road Safety Statement. Highways England have written specifications on what standards they expect from their supply chain and this practice should be more widely emulated across central and local government.

Graduated Driver Licensing

Research shows that graduated driver licensing would save around 100 lives a year in Great Britain.

Some restrictions might include curfews and a minimum number of lesson hours. However, GDL can provide a phased driving experience for new drivers during the period when they are most at risk of being involved in an accident. It also can reduce their exposure to the factors that are most dangerous (speed, alcohol, night driving, carrying passengers).

The Driver and Vehicle Agency have consulted on the measures to introduce Graduated Driver Licensing (GDL) in Northern Ireland. RoSPA would like to see graduated driver licensing introduced across Great Britain.

Lighter evenings

RoSPA also call for an end to Daylight Savings Time clock changes in order to prevent serious injury and death on the road.

During the working week, casualty rates peak at 8am and 10 am and 3pm and 7pm, with the afternoon peak being higher for both. Road casualty rates increase with the arrival of darker evenings and worsening weather

conditions. Every autumn when the clocks go back and sunset occurs earlier in the day, road casualties rise. The effects are worse for the most vulnerable road users like children, the elderly, cyclists and motorcyclists.

Each year, when the clocks go back in the autumn, there is a marked spike in the number of vulnerable road users killed and seriously injured. According to the Department of Transport, in 2017, pedestrian deaths rose from 37 in September to 46 in October, 63 in November, and 50 in December.

The House of Lords have recently discussed the European Commission's proposal to end seasonal clock changes. The European Parliament has backed a proposal to stop the obligatory one-hour clock change which extends daylight hours in summer EU-wide. Each member state will decide whether to keep summer time or winter time all year round, meaning the UK will have to choose either Greenwich Mean Time (GMT) or British Summer Time (BST). However this would only apply until the end of the transition period in which Britain leaves the European Union- which is currently the end of 2020.

RoSPA continue to call on the UK government to consider whether the current clock change is still beneficial, or even necessary. Although RoSPA would like to see SDST implemented, a move to British Summer Time (GMT+1) all year round could save an estimated 30 lives by providing an extra hour of daylight during Autumn and Winter.

Question 4
What evidence is there of the effectiveness of these interventions?

RoSPA Response

20mph limits and zones

In 2014, the Department for Transport (DfT) commissioned engineering consultancy firm Atkins to conduct an evaluation[9] into signed-only 20mph limits without physical traffic calming measures based on 12 case study schemes in England and various comparable areas with a 30mph speed limit in place. The report was published in November 2018.

The study explored the enablers and barriers to implementing a successful 20mph speed limit scheme and found that early engagement and buy-in from relevant stakeholders, clear articulation of the scheme's rationale, objectives and outcomes and tailoring of schemes to the local circumstances are crucial to a scheme being accepted by the public. It had long been thought that most residents and drivers support 20mph schemes, and this study confirmed it.

However, there was a concern amongst members of the public regarding a lack of enforcement of 20mph limits and a view that the chance of being caught exceeding the speed limit is very small.

Overall, the introduction of 20mph limits led to a small reduction in median speed (0.7mph in residential areas and 0.9mph in cities), but vehicles travelling at higher speeds before the change of speed limit reduced their speed more than those already travelling at lower speeds.

There is not yet enough evidence to conclude that in residential areas the introduction of 20mph limits had led to a significant change in casualty and collision rates, but this may change as more data becomes available. However, there was a small but statistically significant rise in reported levels of cycling and walking. 5% of residents said they were walking more and 2% said they were cycling more since the introduction of 20mph limits.

Benefits of the schemes included an improvement in quality of life, community benefits and encouragement of healthier travel modes such as cycling and walking.

The findings of the study support the advice set out in the DfT's Setting Local Speed Limits. The guidance states that traffic authorities have the power to introduce 20mph limits (signed only) and 20mph zones (with physical traffic calming measures) on major streets where there are or could be significant numbers of journeys on foot and on bike and on residential streets.

However, consideration should be given to encouraging traffic authorities to work with relevant partners from the police, health, environment, urban planning, education, and the local community to deliver 20mph limits as part of an integrated approach to addressing transport, community, environment and health objectives.

It is also crucial to use data and research evidence to set clear aims and objectives for 20mph limits and to assess whether they have been effective. It is important to evaluate whether expected objectives have been met. Evidential research should be used to ensure that the correct speed management intervention is used in each instance.

In order to be most effective, it is important that drivers understand and comply with the lower speed limits. As they require drivers to change their driving behaviour and speed choice, they need to be supported by a co-ordinated strategy of complementary measures to make sure that road users know which roads have 20mph speed limits, why, when they apply and that they are legal limits with which drivers must comply. RoSPA are concerned that if implemented in the wrong locations, there is a risk that 20mph limits could be widely disregarded by motorists.

Mobile phones

Driving and conversation are complex, multimodal and attention-demanding tasks, so interference between them is not particularly surprising.

A recent study conducted by Briggs et al (2016)[10], consisting of two experiments, suggested that drivers are particularly distracted by a conversation which encourages them to visualise what they are talking about. Conversations of this type led to 'cognitive tunnelling' and deteriorated driving performance, suggesting that it is the conversation itself that distracts the driver from the driving task. This is because when people are talking about topics that engage 'perceptual systems' (language about visible or audible events) or 'motor systems' (language about performable actions), they may have difficulty perceiving the real world around them or performing the actions involved in driving[4].

Despite the law and the dangers, a proportion of drivers persist in using their mobiles while driving. Surveys conducted in 2009 found that 2.9% of car drivers, and 5% of van and lorry drivers, were talking on either a hand-held or hands-free mobile phone.

A survey of 2,000 drivers conducted by the RAC revealed that just 36% of motorists could correctly state the current penalties of six penalty points and a £200 fine for using a handheld phone. 26% were not aware that penalties became more severe in March 2017. This highlights the need for more publicity through the THINK! campaign. Just under one third of motorists believed that the current penalties are still not enough to stop drivers using their phone illegally and believe that visible enforcement (41%) is key to getting people to change their behaviour rather than introducing even stronger penalties[11]. RoSPA therefore believe that there is a need for stronger guidance for members of the public on the dangers of using a mobile phone while driving, either hand-held or hands-free, with roads policing acting as a visible deterrent for those who ignore the message.

Question 5
How can interventions to reduce the number and severity of road traffic accidents best be implemented?

RoSPA Response

RoSPA believe that interventions should be evidence-based and targeted at specific road safety issues. This involves looking at accident, casualty and any other available data to be sure that the road safety issue needs to be addressed, and research and evaluation reports to check whether the type of intervention being considered is likely to be effective, which can aid the effective use of education, training, publicity and enforcement programmes.

Road safety engineering is an established and effective way of reducing road casualties, and is one of the key reasons why death and injury on our roads has fallen so substantially over the last few decades. RoSPA therefore believe that there should be more funding for engineering schemes in accordance with Vision Zero principles.

A risk based approach can also be a valuable approach to take, as highlighted by the European Road Assessment Programme[12]. Several countries across Europe are now performance managing busy high risk national routes to minimum safety standards.

- In the Netherlands, a target for a minimum 3-star safety standard by 2020 has been set
- In Sweden, a target for 75% of road travel on safe roads by 2020 has been declared
- In Great Britain, a target for a minimum 3-star safety for 90% of travel on the Highways England network by 2020.

Simple, affordable improvements to road infrastructure can reduce the risk of crashes and the severity of those that do occur.

The most effective way to save lives is to target high-risk routes with economically viable solutions. RoSPA agree that building life-saving safety features into new roads and retro-fitting old roads is affordable and achievable.

Technology also has the potential to drastically reduce the number of crashes with the introduction of highly autonomous vehicles. RoSPA welcomes the EC announcement to make it mandatory for all vehicles sold in Europe to be equipped with speed limiting technology from 2022, alongside other safety features like electronic data recorders, automated emergency braking (AEB) and improved visibility installed into Lorries to help drivers look for vulnerable pedestrians and cyclists around the vehicle. However, it will be several years before the existing fleet of vehicles is replaced and all vehicles on the road have this technology available. RoSPA wonder whether the introduction of a scrappage scheme would encourage the replacement of older vehicles with safer and lower emission vehicles.

RoSPA has no further comments to make on the call for evidence process, other than to thank the Commons Transport Committee for the opportunity to comment. We have no objection to our response being reproduced or attributed.

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