



# Leading change in public health

**Calderdale our 20mph story**

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# 20 mph Calderdale story

- May 2014, the Council agreed to a phased approach over 3 years for the implementation of 20mph areas on residential streets and this is due for completion by end of 2017.
- Contentious politically – 20 limits by schools was Conservative proposal
- Sceptical of benefits of ‘blanket’ approach given adherence to 20mph. £ could be better spent – targeted approach.



Hit by a vehicle traveling at

**20**  
MPH



9 out of 10 pedestrians survive.

Hit by a vehicle traveling at

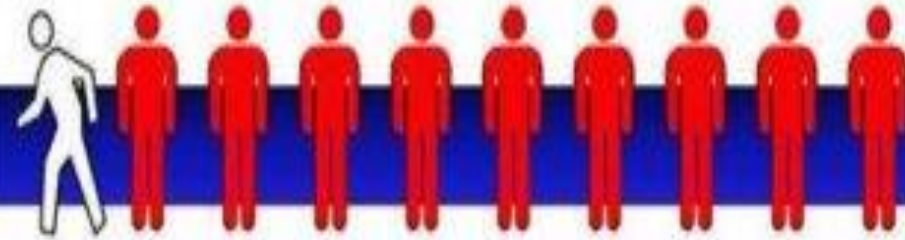
**30**  
MPH



5 out of 10 pedestrians survive.

Hit by a vehicle traveling at

**40**  
MPH



only 1 out of 10 pedestrians survives.

# Edinburgh's 20mph limit trial showed improved popularity, perceptions of safety and cycling and walking levels.

- Support for 20mph rose from 68% before to 79% after
- Those considering cycling to be unsafe fell from 26% to 18%
- Children cycling to school rose from 4% to 12%. For older primary age children it rose from 3% to 22%
- Children allowed to play on the pavement or street rose from 31% to 66%
- Walking trips rose 7%, cycling trips rose 5% and car trips fell 3%.
- Speeds fell an average 1.9mph and by 3.3mph where before speeds were over 24mph

The report concludes that *“Collectively, these conditions offer the ingredients to create ‘liveable’ streets, and help encourage behaviour change through increased active travel in the longer-term”*

# 20 mph Calderdale story

- February 2015 2000 people across Calderdale were interviewed in regarding their views and opinions on 20mph speed limits. 89% were in favour of the introduction of 20mph speed limits across our area.
- Other groups did their own local surveys and different conclusions ! (sample size/methodology unclear)
- Legal consultation takes place on each scheme with stakeholders and residents and comments come into the team via the 20mph email inbox.



## Feedback from Consultation November – January 2013

“For far too long we have lived in streets dominated by motor vehicles. By taming the traffic throughout residential areas and creating a safer, more humane environment we can enhance quality of life for everybody and provide much safer streets for walking and cycling. I very much hope you will proceed with this option”

“I strongly support your initiative to reduce speed on non main roads. We should have a right not to be harmed by traffic”

“At last the council is acting to make it safe for children to walk or cycle to school”

“Fear of their being knocked down by a car is the principle reason my children are not allowed out alone. We do more journeys by car as a result. Some cars drive up Manor Heath Road at 50 mph or more despite the obvious hazards there. Death is much less likely at 20 than 30 mph”

“Safety of others should come before the convenience of drivers”

“I think it really makes a difference to the attitude of drivers who not only slow down but seem less stressed”

“would help return the streets to residents, improve safety, deter rat runs and perhaps encourage use of walking, cycling and public transport instead of reliance on cars”

# 20 mph Calderdale story

- From the outset whilst enforcement has been an issue raised by some residents, the public health emphasis has been upon changing social norms and encouraging drivers to follow the rules via educational and marketing initiatives.
- Social media is actively used to raise awareness whilst engaging with residents and enabling them to engage with each other. We have over 2000 followers on Facebook <https://www.facebook.com/LoveOurStreets>



# Campaign strategy

Attitude shift and behaviour change

OPPONENTS

PRAGMATISTS

CHAMPIONS

Strongly disagree

Reluctantly listen

Want to understand

Agree

Advocates / champions





# 20 mph Limits – Logic Map Calderdale

Key:

Drivers

Active modes / vulnerable users

Residents and active modes / vulnerable users

Potential adverse outcomes and impacts

Objectives

Outputs

Intended Outcomes → Intended Impacts (and potential unintended consequences)

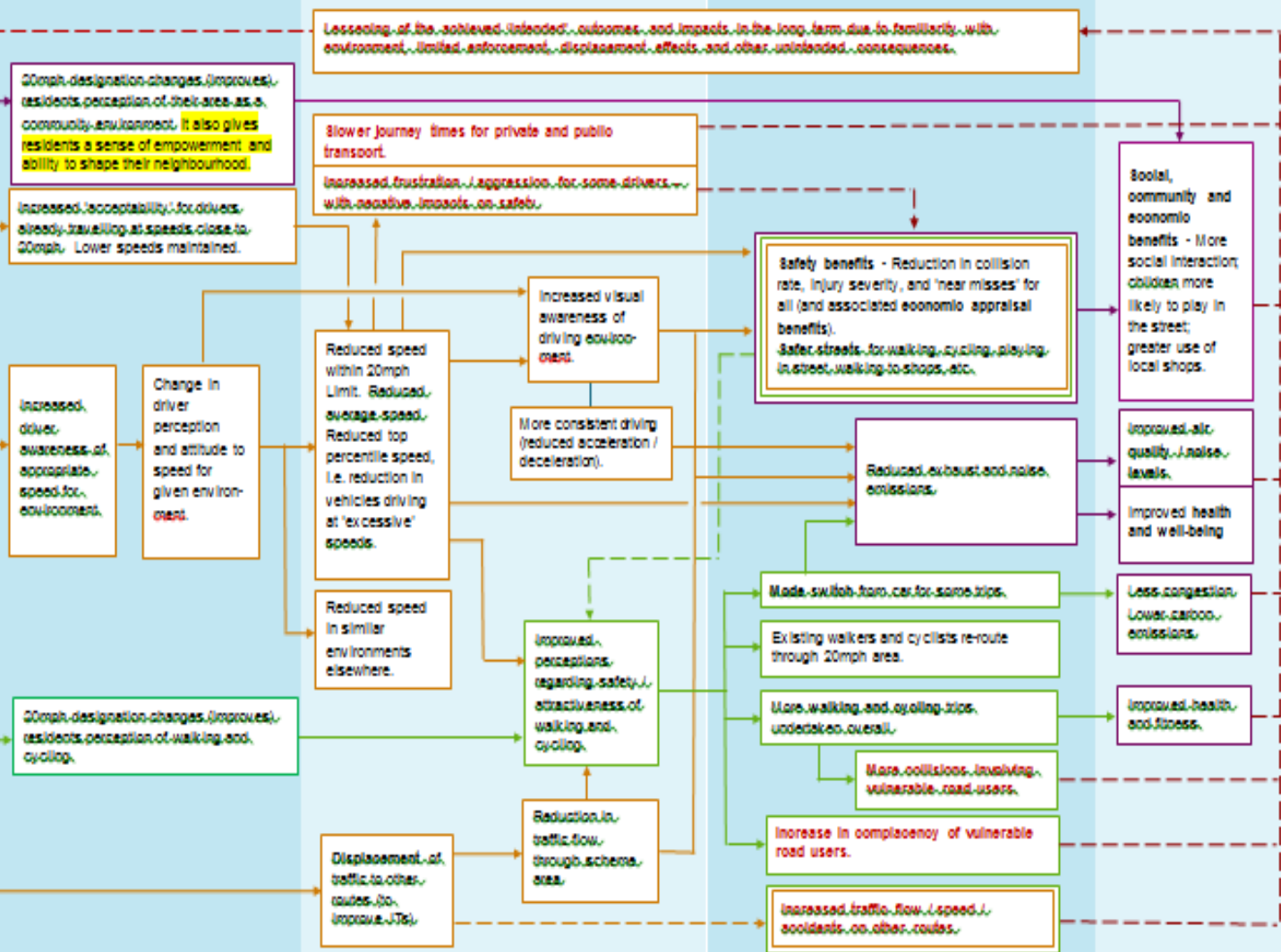
- 1 – Reduce speed and K8s;
- 2 – Change driver behaviour;
- 3 – Encourage Active Travel by improving walking and cycling routes.

**Scope of Limit:**

- All residential roads;
- Exceptions are main roads.
- Each Phase and sub-clusters have been assessed individually through qualitative and quantitative analysis (including engineering viability), local knowledge and the application of spatial sensibility.

**Delivery of 20mph Limit Scheme:**

- Five phases.
- 50% funded by Health and Wellbeing and the other 50% by Local Transport Fund, G0stop, signs.
- Six open consultation sessions and surveys send to a panel of 1,500 people. Online survey also conducted.
- Some traffic calming already



Intermediate Outcomes – First Order

Intermediate Outcomes – Second Order

Transport Outcomes

Wider Impacts

# 20 mph Calderdale story

- 20mph does have to be self- enforcing and the police will not generally enforce 20 mph unless there is evidence that safety is at risk and it is agreed as a local problem.
- Since the beginning of September 2016 the police have been active in many areas of Calderdale (including 20mph areas) through Operation Hawmill.
- 20 mph limit part of numerous questions and motions at council involving speed and police operations



# 20 mph Calderdale story

- Police work with neighbourhood teams and schools re impact of speeding and road safety, This activity is driven by local requests either from ward forums, community groups or the local school.
- Updates on activities posted on police and local authority Facebook pages
- Calderdale Road Safety Partnership Board re- established to increase collaborative working



# Challenges

- **Planning and design** – this is resource intensive requiring desk research, local knowledge and site visits to avoid potential placing of signs in trees or outside windows!
- **Installation** - Each area takes 4 weeks to install, potential confusion for drivers – gateways first followed by repeater signs.
- **Campaign** - Phased area implementation means complicated campaign planning



# Challenges

- **Consultation** with stakeholders on boundaries and roads can be lengthy but bus routes can be contentious
- Advertising of speed limit order to the general public in press and on 'appropriate' lamp posts in the area affected – resource intensive with large amount of notices that are required to be placed on streets



# 20 mph Calderdale story

- Speed tubes were placed at various locations on a mix of road types in the 20mph limit areas to record the traffic volumes and speed of vehicles. These are installed prior to the 20mph and approximately 12 months after the scheme is operational.
- 2 million readings



# 20 mph Calderdale Results

- Average reduction in speed of 2.2mph across the 20mph locations resulting in an average speed of 22.3mph.
- The biggest reduction was 5.4mph, some evidence to show longer scheme introduced the greater the fall .
- Small number of roads where speeds have not reduced.



# 20 mph Calderdale Evaluation

- A door to door baseline survey / questionnaire of 400 people was conducted in September 2015 with Todmorden residents to understand attitudes and behaviours towards 20mph and active travel.
- A repeat survey was undertaken in Todmorden September 2016 (12 months after its introduction) to gauge changes in attitudes and activity levels.
- A similar before and after survey done in the Sowerby Bridge area in 2015 and 2017





# 20 mph Calderdale Results

- Survey data – 240 responses in Todmorden and 500 in Sowerby Bridge
- Support for the scheme post-implementation (over 80% in both areas).
- The vast majority of residents feel that 20mph is an appropriate speed for their street
- The main perceived advantages are around safety (particularly for residents and pedestrians).
- There has been a significant increase in “aggressive driving” as a perceived disadvantage post-implementation
- Significant increase in cycling every day amongst those who already owned or had use of a bike in Todmorden
- No change in walking patterns in Todmorden but an increase in walking in Sowerby Bridge

# 20 mph Calderdale Results

- Casualty figures have been assessed prior to the introduction of the 20mph area and the three years post introduction.
- There has been a reduction in casualties in all areas of 22%.
- When compared to national and regional data the fall in our injuries on the roads is faster than other areas.
- It implies that the 20mph policy is making a difference



# 20 mph Calderdale Results

|                         | <b>Driver<br/>Passenger<br/>Slight</b> | <b>Ped Slight</b> | <b>Driver<br/>Passenger<br/>Serious</b> | <b>Ped<br/>Serious</b> | <b>Driver<br/>passenger<br/>Fatal</b> | <b>Ped Fatal</b> | <b>TOTAL</b> |
|-------------------------|--|-------------------|---|------------------------|---------------------------------------|------------------|--------------|
| <b>Before<br/>Total</b> | 95                                     | 36                | 9                                       | 10                     | 1                                     | 2                | 153          |
| <b>After<br/>Total</b>  | 67                                     | 35                | 7                                       | 10                     |                                       |                  | 119          |



# 20 mph Calderdale Results

- All Costs Anticipated total £880k

|   | Actual spend to date                          | Forecast spend to end of scheme |
|---|---|---------------------------------|
| Public Health                                 | £215,000                                      | £115,000                        |
| Economy & Environment WY Local Transport Plan | £322,000 (split £97,000 and £225,000 capital) | £198,000                        |



# 20 mph Calderdale Results

<https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2015>

## Average value of prevention<sup>1</sup> of reported road accidents<sup>2</sup> by road type:

| GB 2015              |                             |                                 |                        |           |        |
|----------------------|-----------------------------|---------------------------------|------------------------|-----------|--------|
|                      |                             |                                 |                        |           | £ 2015 |
| Accident Type        | Built-up roads <sup>3</sup> | Non Built-up roads <sup>4</sup> | Motorways <sup>5</sup> | All Roads |        |
| Fatal                | 1,922,917                   | 2,066,360                       | 2,121,965              | 2,005,664 |        |
| Serious              | 221,054                     | 248,472                         | 258,769                | 229,757   |        |
| Slight               | 22,880                      | 27,598                          | 32,964                 | 24,194    |        |
| All injury accidents | 61,966                      | 125,975                         | 94,161                 | 76,466    |        |
| Damage only          | 2,027                       | 2,964                           | 2,848                  | 2,142     |        |
| All accidents        | 5,233                       | 16,942                          | 13,465                 | 6,715     |        |

1 The costs were based on 2015 prices and values

2 The number of reported road accidents were based on 2015 data

3 Roads with speed limits of 40pmh or less, excluding motorways and A(M) roads

4 Roads with speed limits greater than 40mph, excluding motorways and A(M) roads

5 Includes motorways and A(M) roads

# 20 mph Calderdale Results

- Cost effective probably though savings in other parts of system
- Being cautious given not a 5 year review - but

ENCOURAGING !

- Take out small fatality nos. Just focus on slight injuries
- Being conservative say real reduction of 20 slight injuries then equates to a saving in region of £450k to date.
- If continued then scheme will certainly give a saving within the 5 year time frame

# 20 mph Calderdale Next Steps

- Monitor speeds (at 12 months) and casualties (after 3 years) in the remaining 20mph areas when data is available.
- Analyse areas where speed and casualties have not reduced and identify actions for improvements
- Work on aggressive driving



# 20 mph Calderdale

Thank You

Any questions?



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