

***Making Hereford a Great
and Healthy City
in which to Work, Live,
Study and Relax***

HEREFORD HAS A GREAT FUTURE

A new breed of university aimed at technology
and engineering



A developing and dynamic Enterprise Zone



A central area brownfield site (ESG) ripe for
development



An historic city centre and cathedral attraction

What is absent is a good comprehensive, innovative sustainable public transport and pedestrian/cycle provision

Herefordshire Council has worthy objectives Stated in its Local Transport Plan



1. To enable economic growth.
2. To provide a good quality transport network for all.
3. To promote healthy lifestyles.
4. To make journeys safer, easier and healthier.
5. To ensure access to all services for those in rural areas.

But the plan concentrates mostly on a proposed bypass with little mention, or positive proposals, for the future of the city's internal transport system in the light of the exciting city developments that are taking and will take place.

Other British cities are addressing the growing environmental problems associated with traffic by utilising new technology and innovative transport systems

With vision

Hereford could surpass them

The Hereford Sustainable Transport Group (HSTG) is working towards such a vision with three principal transport developments that incorporate twenty first century innovation, engineering, sustainability and importantly, help improve the city environment and air quality.

(HSTG is a joint venture of Rail & Bus for Herefordshire and the Hereford Transport Alliance)

1. A new spinal Ultra Light Rail tram route connecting the Enterprise Zone with the city, main line railway station and new University sites.

This incorporates a safe segregated pedestrian and cycleway throughout.

2. A city wide network of frequent electric bus routes concentrating on the new transport hub at Barrs Court station and incorporating bus lanes and junction priority.

3. A comprehensive segregated network of primary pedestrian and cycle-ways with associated active traffic management at key road junctions and including a blanket city wide 20mph limit with shared space areas.

All three elements can positively assist in achieving Herefordshire Council's objectives and make Hereford a Great and Healthy Place to Work, Study, Live and Relax: and a start on them can be made now.

The Hereford Ultra Light Rail Project

A New Transport Technology and Engineering Project for the City

Talk of a tram route for the city utilising ex-railway formations has been around for over two decades. Since initially mooted there have been significant developments both in the land use development of the city and in the technology and engineering of **Ultra Light Rail (ULR)** systems.

Hereford now has an Enterprise Zone at Rotherwas south of the river. Significant housing development has also taken place south of the river. Adjacent to the historic core of the city is a large area to be developed as contained in the regenerative Edgar Street Grid (ESG) plans

What better a project than an Ultra Light Rail route connecting all these major and significant developments

Hereford is getting a New University Specialising in Technology & Engineering

Launched in 2015 with the support of a strong coalition of leading universities, engineers, business people and MPs, the New Model in Technology and Engineering (NMiTE) offers a way for Britain to address a shortfall of 40,000 engineering graduates and will encourage more women to work in the industry. The University will make Herefordshire a more attractive place for young people to live and study and will revitalise the County's economy.

NMiTE will be developing an agile campus including academic, administrative and new student accommodation in the Hereford city core (ESG site) with workshops and incubator units on Hereford's Enterprise Zone, Skylon Park.

'Sustainability will be at the heart of our campus – as it is at the heart of our curriculum, our partnerships and our operations'.

We hope that the university will join with HSTG in a new, exciting ULR project to help regenerate Hereford City.

The ULR Project Will Include

- ◆ Design and engineering of the spine route utilising 1. new route from EZ to Redhill (including park and ride site on A49T): 2. the existing Great Western Way from Redhill to Whitecross Road: 3. redundant rail formation from Whitecross to Barrs Court Railway Station. The route will incorporate a pedestrian and cycleway throughout
- ◆ Design of route penetrating the core city centre
- ◆ Design of track and stations utilising new concepts in slab track formation
- ◆ Design of ULR vehicles using research into kinetic energy and battery/electric power modes

A full engineering and environmental feasibility study leading to the development of a sound business plan in line with Department for Transport project evaluation guidance.

The New University and Hereford City are ready for these exciting developments

Changing the perception of the tram

To many people the perception of the tram remains that of an outdated system that was once common on the streets of many British cities



Even the modern city tram is perceived as a heavily engineered system relying on overhead power lines



Innovation and Technology - Ultra Light Rail Systems (ULR).

Such systems are based on developments in battery, hydrogen cell and flywheel kinetic energy trams. These systems eliminate the need for extensive overhead power lines

The systems use a range of gauges in line with the route characteristics and space requirements.

Development in track technology is giving us new forms of easy to lay light weight slab track which can be flush with the road surface
This eliminates the need for conventional rail ballasting and sleepers

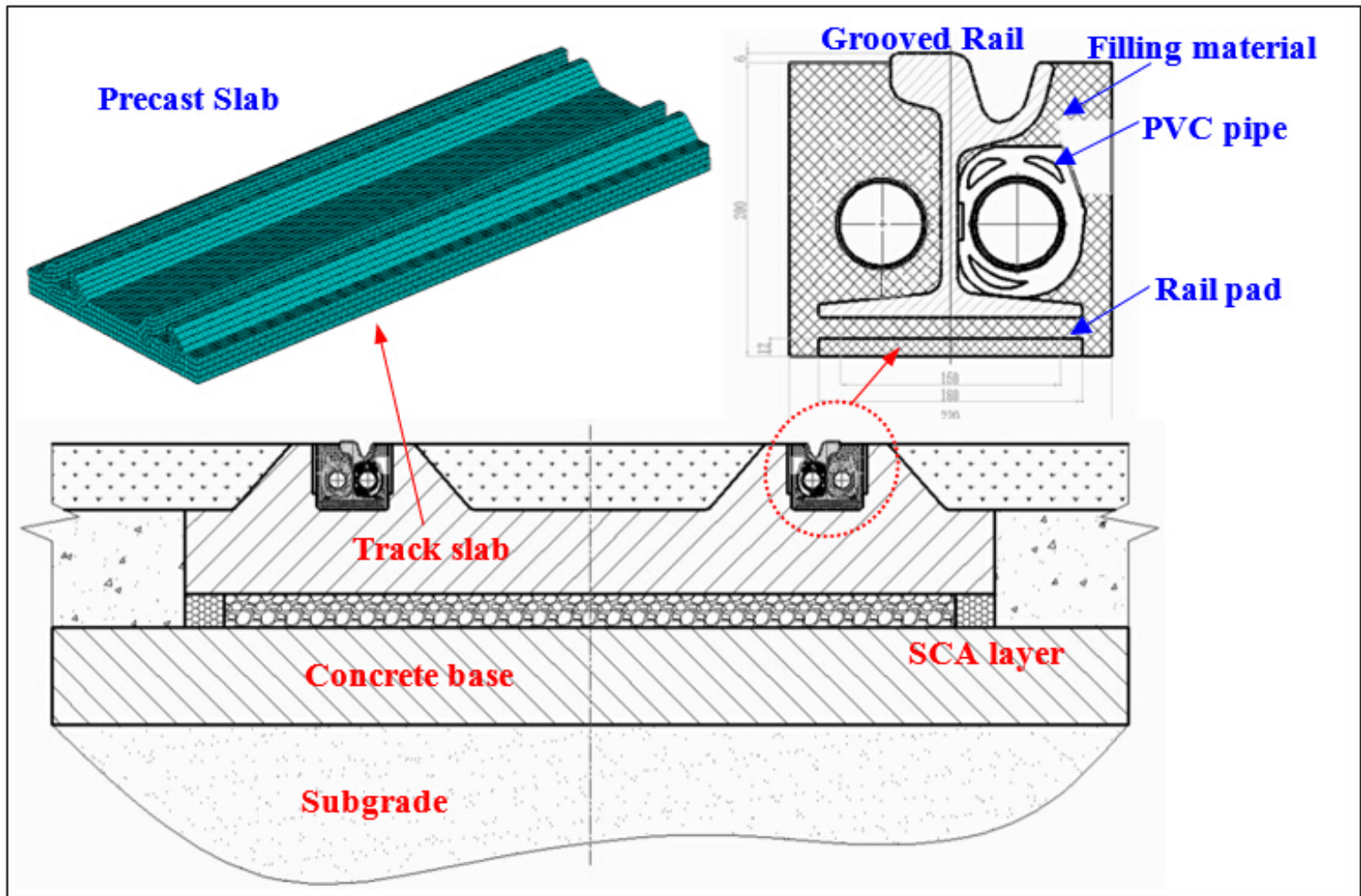
Tram stops too are seeing a design revolution with good lighting, cctv, real time information systems and easy to use ticket dispensing equipment

Flywheel technology trams already operate at Stourbridge in the West Midlands. These low emission vehicles have been operating successfully for a number of years

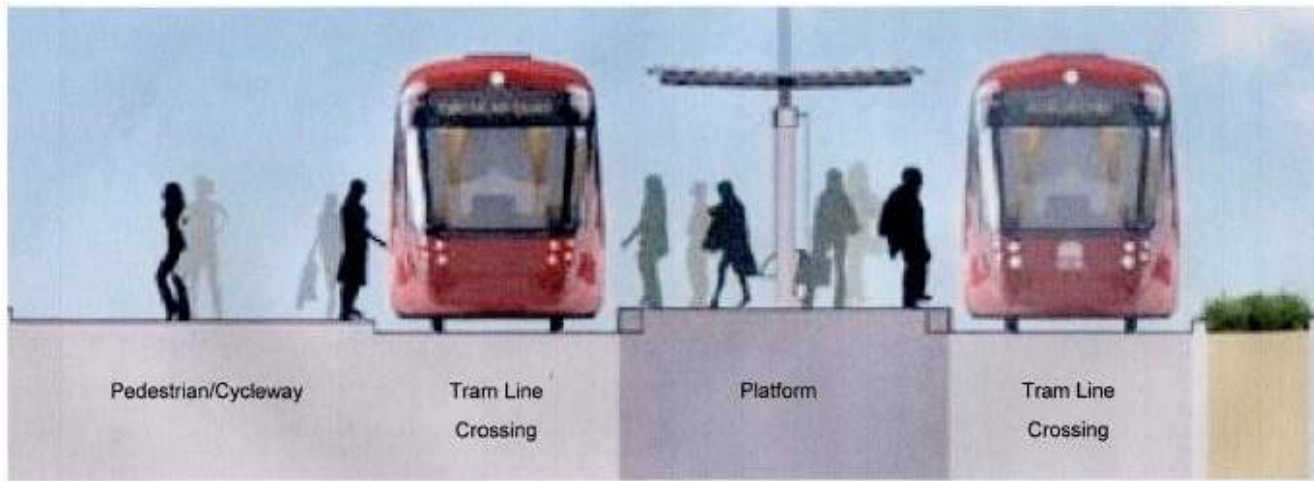


Whilst on the continent and in Japan, hydrogen cell fuelled trams are now being successfully developed: emissions are nil





Slab track construction has significantly reduced costs whilst providing for track that is flush with the roads and pedestrian/cycle ways. Latest innovation incorporates solar panels on the slab which provide power for the recharging of tram batteries and/or flywheels.



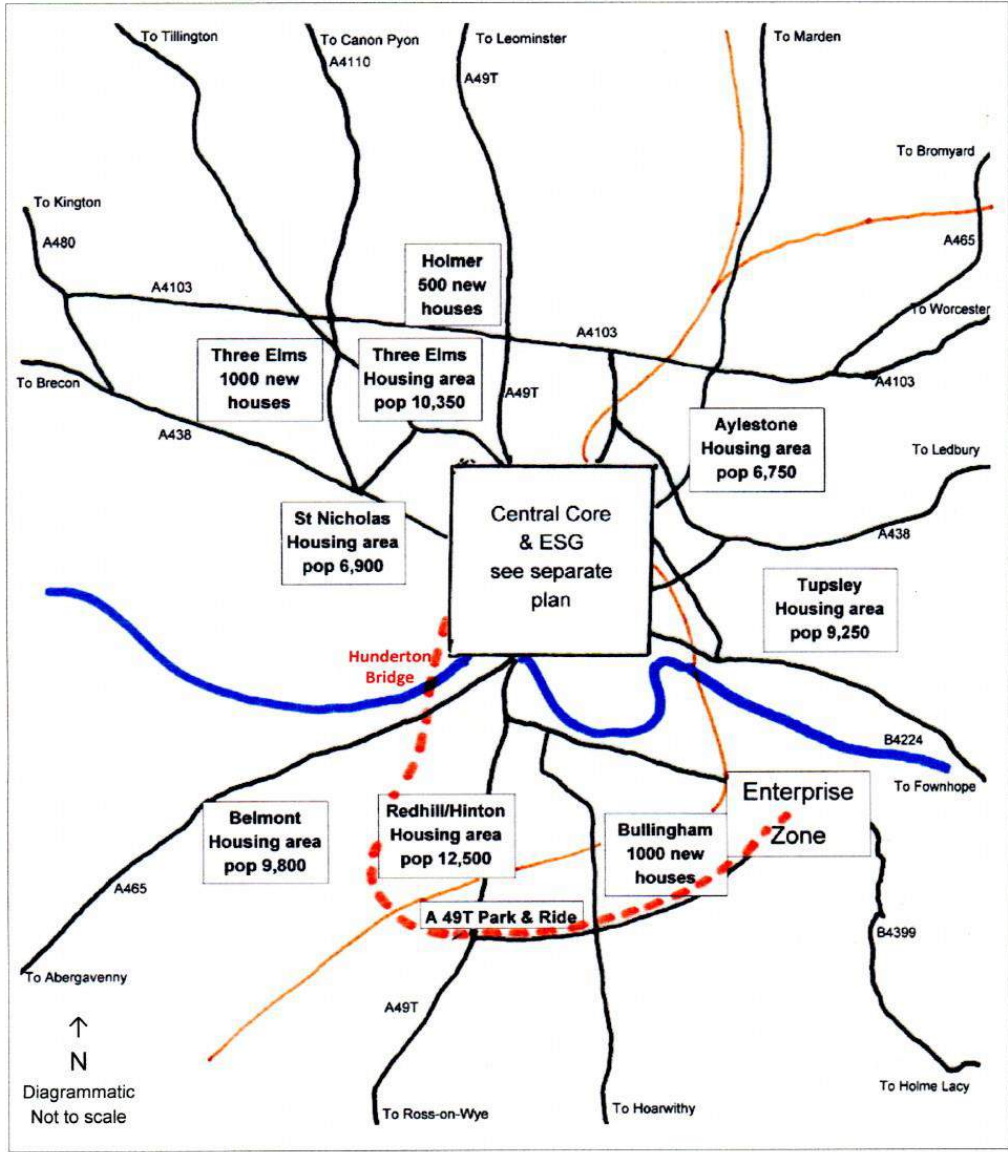
A well designed line formation and island tram stops means the tram route will incorporate a pedestrian/cycle way throughout

Spacious well lit tram stops with cctv coverage, real time tram information systems and easy to use ticket machines will be a feature of the system



Diagrammatic plan showing possible ULR route in red connecting

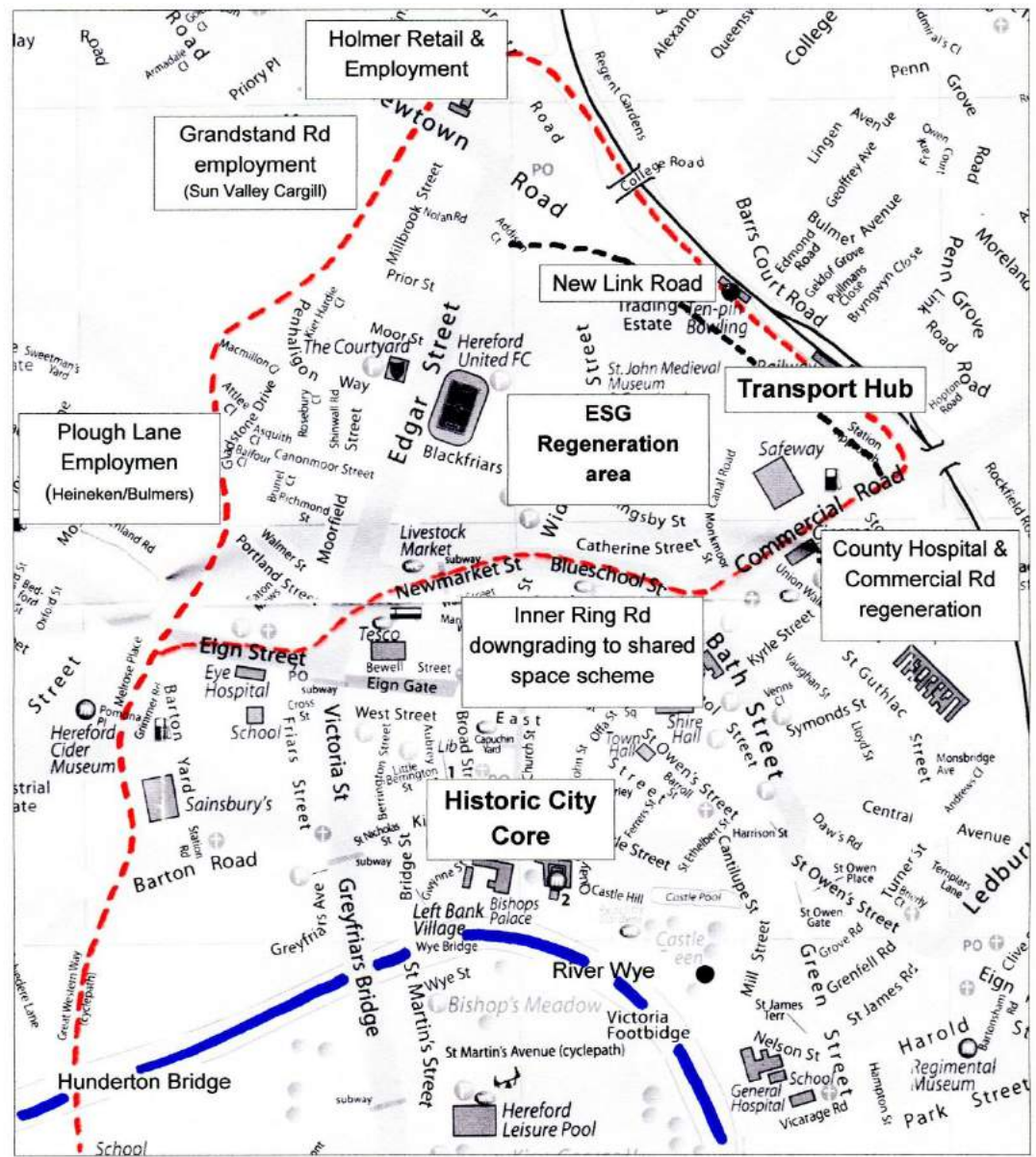
The Enterprise Zone
 ↓
 Bullingham housing area
 ↓
 A49T Park & Ride site
 ↓
 existing high density housing areas in Belmont and Redhill/Hinton wards
 ↓
 the city core and ESG development area



Ultra Light Rail (ULR) Route Possibility: Key Diagram

- - - Light Rail Route
- Main road network
- Main Railway Line
- River Wye

Potential ULR city connectivity route in red serving



Ultra Light Rail (ULR): City centre connectivity

--- Potential ULR route

--- New Link Road (2018)

Electric Buses for Hereford

Electric Buses in the Small City Environment

Whilst a ULR route is an exciting prospect it is realised that it serves only part of the city on the most heavily used cross river route. The use of electric buses can be introduced elsewhere with a comprehensive network serving the Whitecross, Three Elms, Bobblestock, Holmer, College Estate, Tupsley, Bartonsham as well as ULR integrated routes south of the river.

The key to the network would be the focus of routes on the planned transport hub at Barrs Court station, enhanced city centre stops and integration with tram, train and county bus services

The Government is keen to promote the use of electric buses in the urban environment and provides a number of grants to local authorities for their use.

The mechanism for establishing a partnership with bus operators is also available to local authorities via the recent Buses Bill

The onus is on Herefordshire Council to take advantage of the government's lead for the environmental benefit of the city.



Optare are leaders in the manufacture of medium size city electric buses. They are based on the successful Optare solo bodywork. The current Hereford City bus operator has a sizeable fleet of ageing diesel versions of these vehicle. The vehicle above displays the signage '*Orkney's Electric Future*'. If a Scottish island can go electric then surely Hereford can! Electric buses are low emission.

The Transport Hub

2006 saw the creation of ESG Herefordshire Ltd to oversee the redevelopment of the large run down brownfield site between the inner ring road (Blueschool St/Newmarket St/Edgar St) and the railway line at Barrs Court. The plan included a new modern transport hub (interchange) at Barrs Court railway station.

On the transport hub, ESG Ltd stated: *'Providing a sense of arrival for visitors and a central connectivity point for all modes of transport, the hub will provide transfer opportunities for trains, buses, taxis, private cars, hire cars, cyclists and mobility vehicles. The safety of pedestrian is a priority and people on foot will benefit from wide and well drained pavements, with benches and other rest and shelter facilities readily available'*.

Fast Forward to 2018

It is now 2018. The ESG new retail centre and the new link road have been built. However, the promises of better pedestrian and cycling access to the station and better connectivity with the city centre seem to have evaporated. The proposed transport hub remains an area of derelict land with no indication of a design if it is ever to materialise in the near future.

Even Aberystwyth can manage a low cost transport hub at their railway station with modern well lit shelters, seating areas, toilet facilities and information systems. Why cannot Hereford? Has the ESG vision become a shattered dream?



Pedestrians & Cyclists

Pedestrians and Cyclists

Walking and cycling are an important part of an integrated sustainable transport plan. The use of these modes is directly related to safety and should take account of:

The use of 20mph zones to aid road safety.

The use of segregated walk/cycle ways on major radial roads.

A greater availability of safe shared space schemes.

The design of a joined up city wide network of walk/cycle routes. The proposed tram route provides for a segregated walk/cycleway throughout its length.

The city wide network would be available to mobility scooters.

The development of schemes such as cycle to work incentives with employers, cycle hire and a communal bike collection and deposit scheme.

The use of area maps, information systems and signing, all adding up to a comprehensive city wide network.

New
segregated
cycle-ways
for Bristol



Segregated
cycle-ways
In
Cambridge

***Why not a
network for
Hereford?***

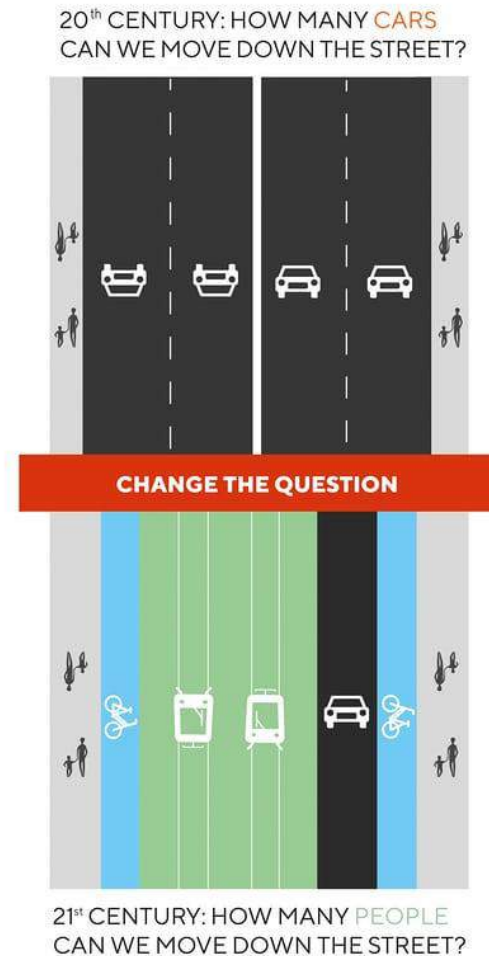


In Copenhagen they have realised something quite important

Moving people not cars

The 21st century model at the bottom - how many people can we move down the street? - has 10 times the capacity than the 20th century model at the top

Meanwhile, Hereford wallows in 1970's roads transport planning and destruction of the valuable Herefordshire landscape!



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***THERE IS A GREAT
DEAL OF WORK TO BE
DONE***

LET'S START IT NOW