



Lower Thames Crossing

Pathfinder project for
carbon neutral construction

November 2023

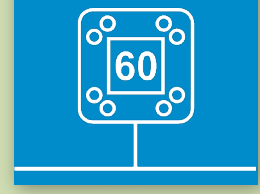
Context - Crossing the Thames

Dartford is the only road crossing of the Thames east of London

Only 0.1% of commuters in the region use the crossing



Opened in 1963



Designed for 135,000 crossings a day, regularly carries 180,000



The existing Dartford Crossing is vital for UK freight

Traffic levels
are now up to

100%

of pre-pandemic
levels



Almost **40%**
of vehicles carry goods.
About double the
national average, and
up from 30% in 2019



**Significant
proportion** of all
HGV traffic from the
Port of Dover and
Eurotunnel uses
the crossing



The crossing saw
its busiest day ever
for HGV traffic in
**December
2020**



Dartford is the **worst** performing part of the motorway

3hrs

of closed lane per day due to incidents

3,000

incidents per year



4 weeks of closures

of a tunnel per year due to operational interventions



Less than 1 in 5 journeys

are within 2 minutes of the optimal journey time*

1 in 7 journeys

take more than five times longer than they should*



*data for Northbound weekdays 4-5pm, J3>Crossing, 2018 & 2019

Lower Thames Crossing



Biggest road project since the M25 opened 30 years ago



Nearly **double road capacity** between Kent and Essex



Relieve congestion at Dartford by reducing vehicles using the crossing by 20%



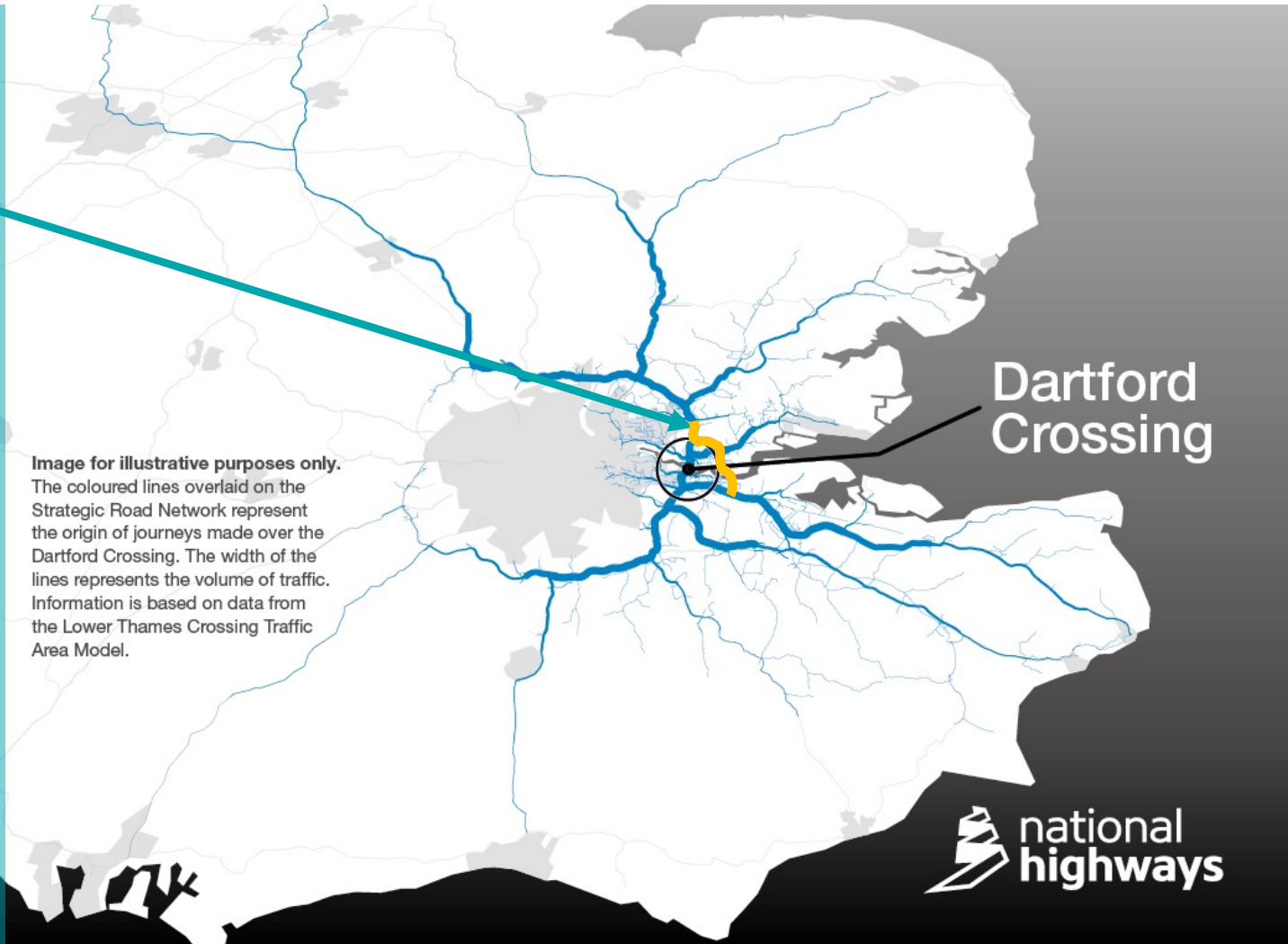
Approximately **14.5 miles (23km)** of new road connecting M25, A13 and A2/M2



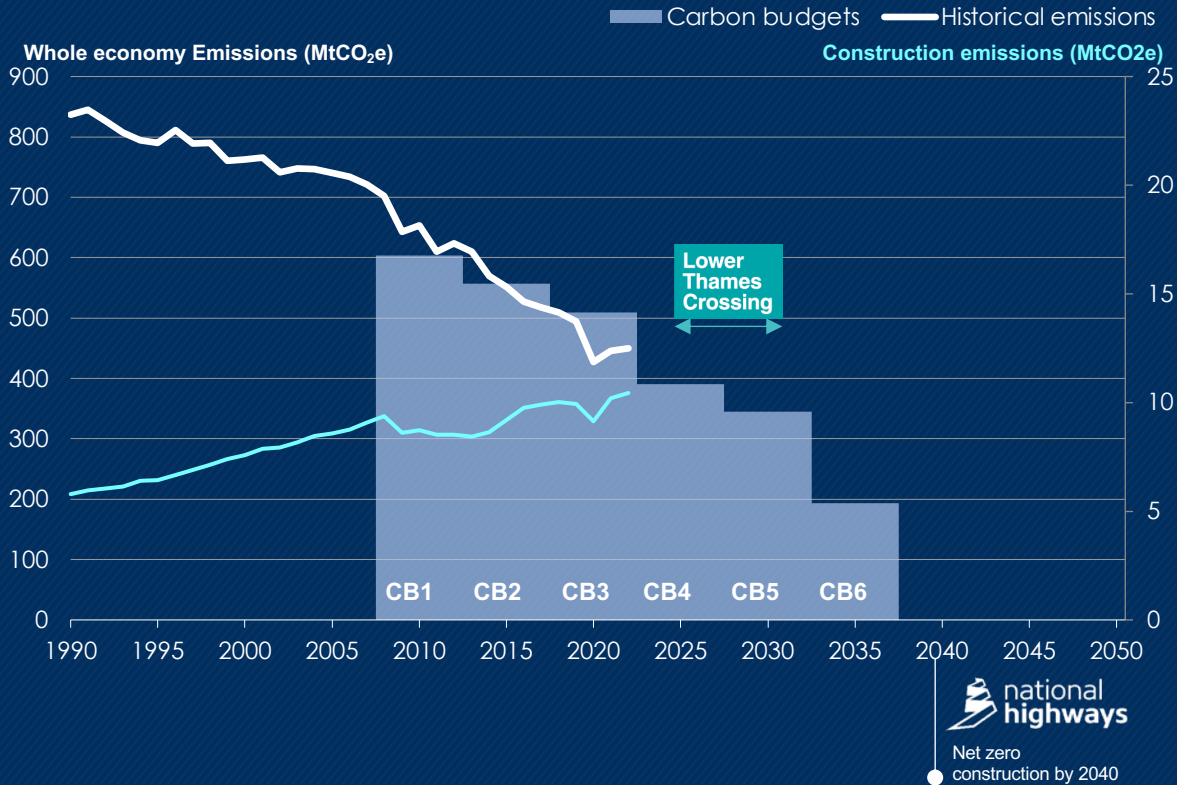
Two 2.6-mile tunnels – UK's longest road tunnels and world's largest bored tunnels



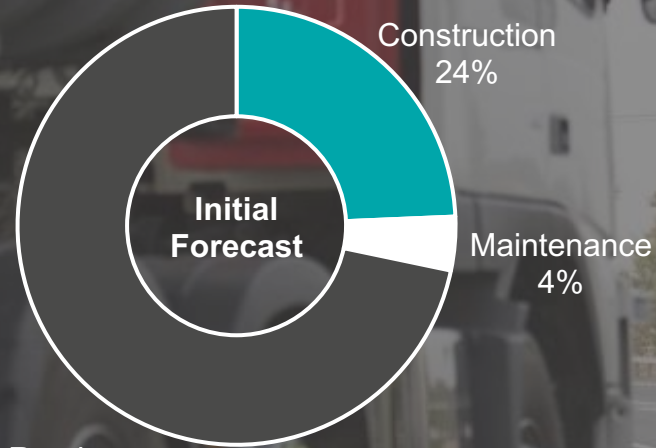
Three lanes in both directions with 70mph speed limit and no restrictions for freight



Challenging delivery context

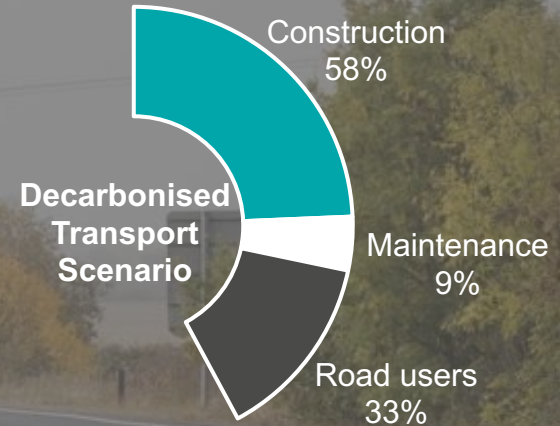


As Transport Decarbonises the Carbon Challenge shifts to Construction



Road users
72%

2020



2022

Lower Thames Crossing will be the Greenest Road Ever Built

... and a pathfinder for low carbon construction. Our ambitions are to:

Construct LTC for the lowest practicable carbon emissions



Drive low carbon innovation and approaches



A legacy that enables future projects to achieve carbon neutral construction (knowledge / skills / supply chain)



MAINTENANCE & CONSTRUCTION EMISSIONS

Net zero by 2040

- National Highways is committed **to net zero construction & maintenance by 2040**
- The timing, scale and location of the Lower Thames Crossing, make it an ideal pathfinder project supporting this objective

Our route to decarbonisation



We are encouraging other five clients/projects to join us on the journey.

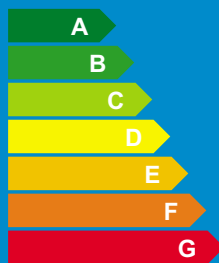
Know your numbers
(PAS 2080)



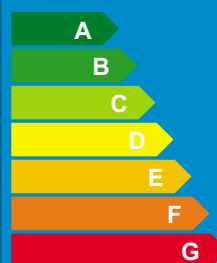
Contract for low carbon



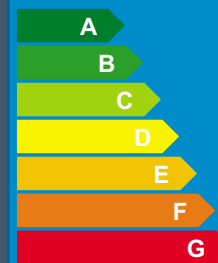
Diesel free sites



Concrete routemap



Green steel



Questions?

