Chapter six – Expected outcomes of the transport strategy

6.1 Analytical approach

687 In assessing the challenges facing London's transport system, the strategy considers the current situation in the Capital and also looks forward to the London of 2031. There has been a considerable amount of analysis underpinning the new MTS, which includes:

- A detailed assessment of past and current patterns and trends in travel and the performance of the transport system set out by the Travel in London reports, published by TfL in April 2009 and March 2010
- A projection of outcomes in 2031 on the basis of a committed, funded transport investment programme in the TfL Business Plan (up to the end of financial year 2017/18) and GLA projections of employment and population. After 2018, only the completion of Underground line upgrades – and the continuation of existing services – is assumed in this projection. This is called the reference case
- Sensitivity analysis. All projections have some uncertainty, so development of the strategy has not simply considered one projection of the future. Sensitivity analysis tests have therefore been run, which vary key assumptions in the reference case, such as with different levels or patterns of population and employment growth
- Scenarios. There have been a number of scenarios tested, for example, different transport investment scenarios and the impact of other transport policies, including cycling. One scenario is the reference case; the others are compared either to the reference case or the base year (2006)
- The joint Economic Evidence Base, produced by GLA Economics, to underpin the London Plan, MTS and EDS
- The Integrated Impact Assessment (IIA)

688 The reference case, sensitivities and scenarios are essentially aimed at estimating what would happen in the future under different circumstances – and the consequences of different investments, policies or other assumptions. The Travel in London report, which analyses what has happened to travel and transport in the Capital in the past, has also informed the forward-looking analysis carried out for the MTS.

689 Most of the scenarios compare the outcomes for 2031 with current levels and the reference case, which includes already committed schemes.

690 As well as transport scenarios, the MTS analysis also looked at scenarios involving changes to land use. This reflected the integration of land use and transport planning: the production of the MTS, London Plan and the EDS has gone well beyond the minimum requirement of the MTS having regard to the London Plan and other Mayoral strategies. Considerable effort has gone into making sure they were produced together and aligned. The scenarios tested looked at varying both land use and transport.

691 Employment and population projections have been supplied by the GLA and model inputs have been informed by discussions with the authority, including the London Plan team, Data Management and Analysis Group (DMAG) for population projections, and GLA Economics

in order to achieve a common approach. The range of sensitivities is aimed at producing a picture of the scale of uncertainty based likewise on common information.

692 Projections of ground-based, transport-related CO_2 emissions in the MTS are derived from the same analytical tool as transport sector CO_2 projections in the Mayor's CCMES.

6.2 Anticipated outputs and outcomes

693 The outputs and outcomes of implementing the full transport strategy can be compared to:

- London as it is now
- London as it would be in 2031 with no further investment at all (beyond 2010)
- London as it would be in 2031 with the committed TfL Business Plan and HLOS only (the MTS reference case)

694 The outcomes for London with no further investment beyond 2010 would be truly dire: crowding on the Tube and National Rail would get significantly worse, road congestion would escalate, asset condition would deteriorate making journeys far less reliable and increasing journey times, and transport's impact on the environment would increase. London's economy would be unable to grow and its viability would be threatened. Government has recognised this and has committed, through the 10-year TfL funding settlement and the HLOS process, to one of the largest programmes of infrastructure investment the Capital has ever seen. This programme of investment has started and will run to 2020.

695 Analysis for the MTS has therefore focused on the outcomes of this committed investment programme and identifying what more is needed to support London's growth beyond that period and to meet the Mayor's desired outcomes. Analysis shows that significant benefits are delivered by the currently funded investment and that they will contribute to address the challenges identified in chapter four. However, because of the greater demand placed on the transport system by continuing economic and population growth, these investments will not be sufficient to meet London's needs and the Mayor's desired outcomes for 2031.

696 The rest of this section therefore focuses on the anticipated benefits of the whole transport strategy compared to 2006 levels unless stated otherwise. Figures 67 to 85 summarise the anticipated outcomes of the MTS for each of the challenge areas identified in chapter four. They include the effects of the measures in the implementation plan in chapter seven – the impacts are therefore different from those in chapters three and four which are based on the reference case.

Figure 67: How the strategy would support population and employment growth

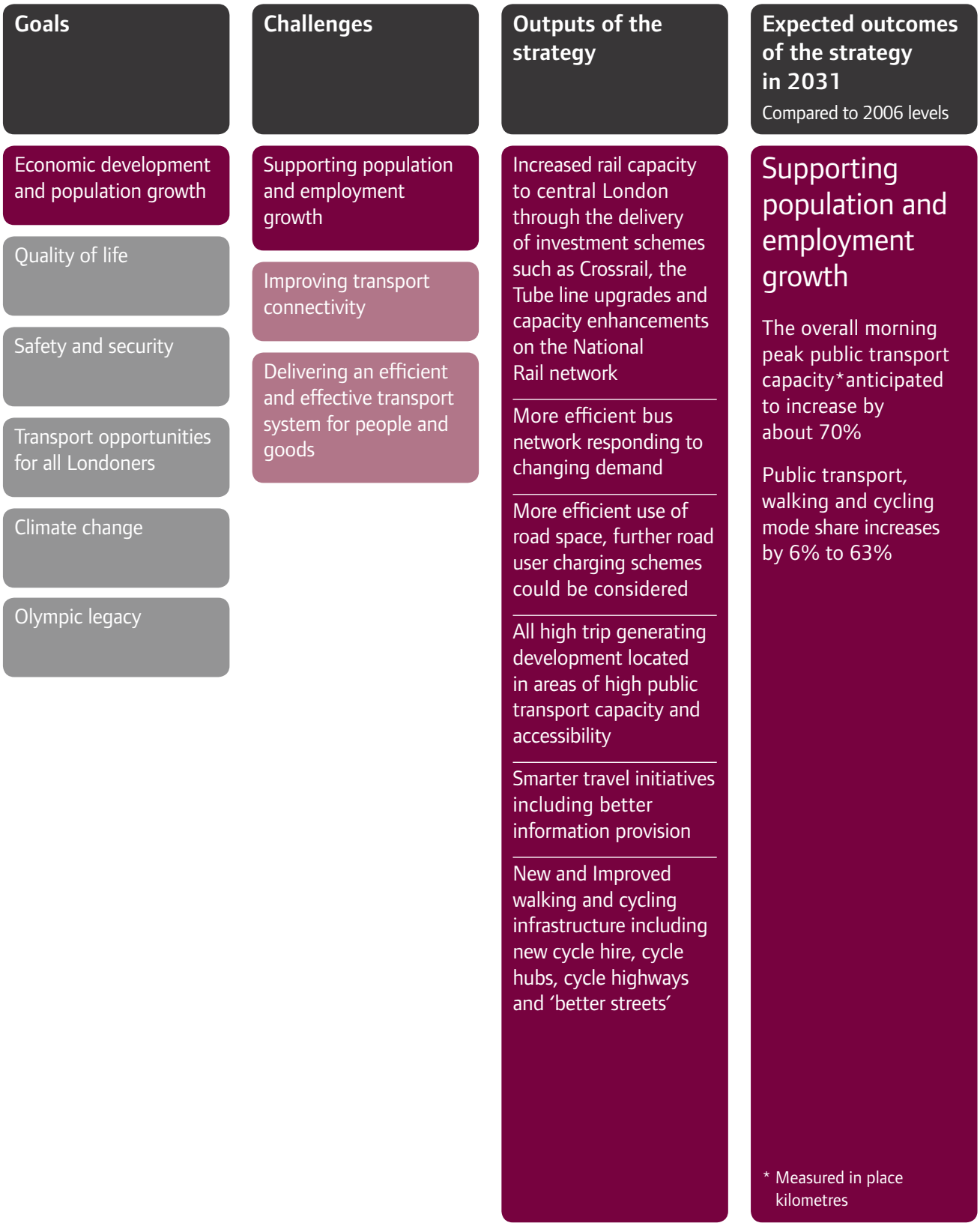


Figure 68: How the strategy would enhance transport connectivity

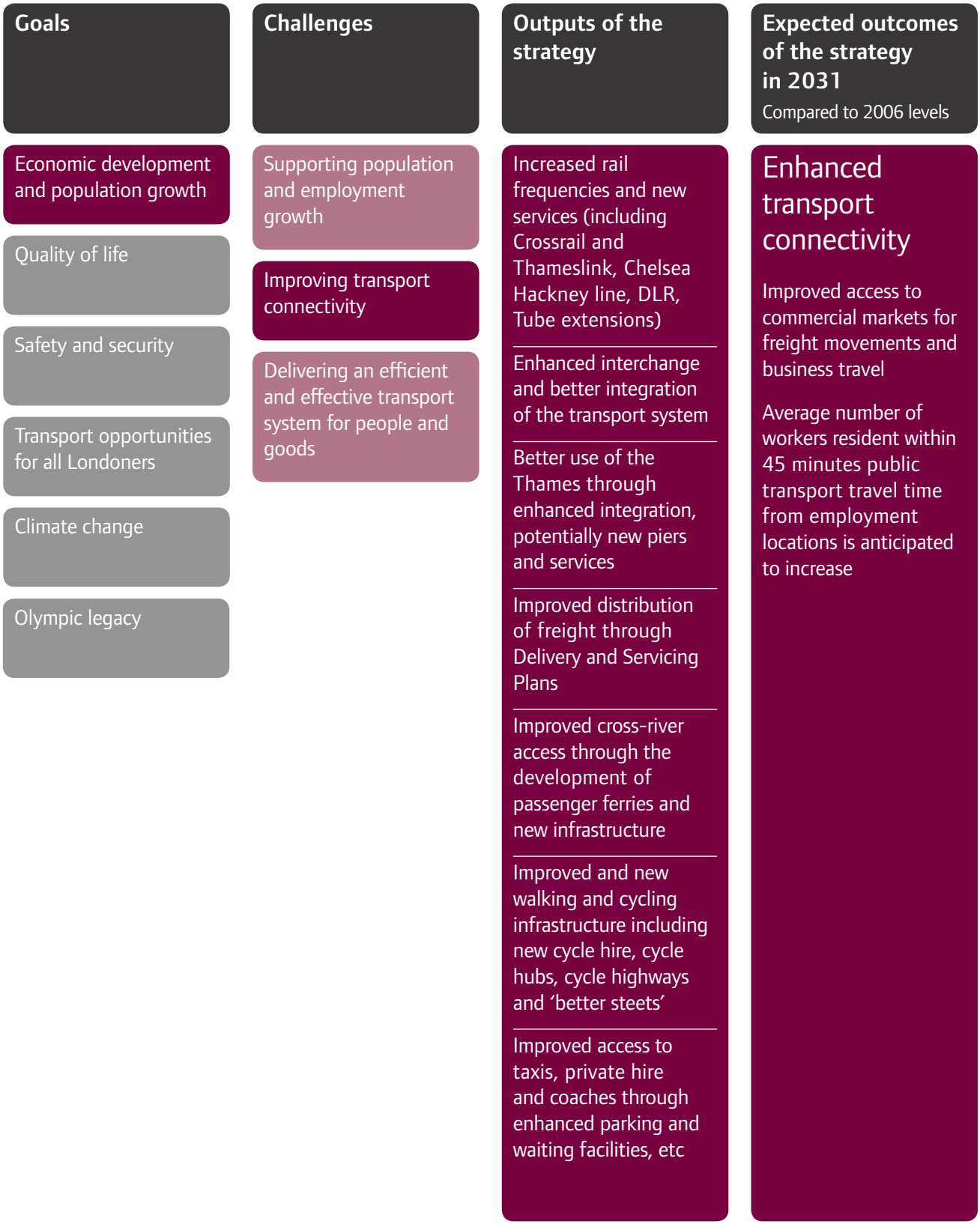


Figure 69: How the strategy will deliver an efficient and effective transport system for people and goods

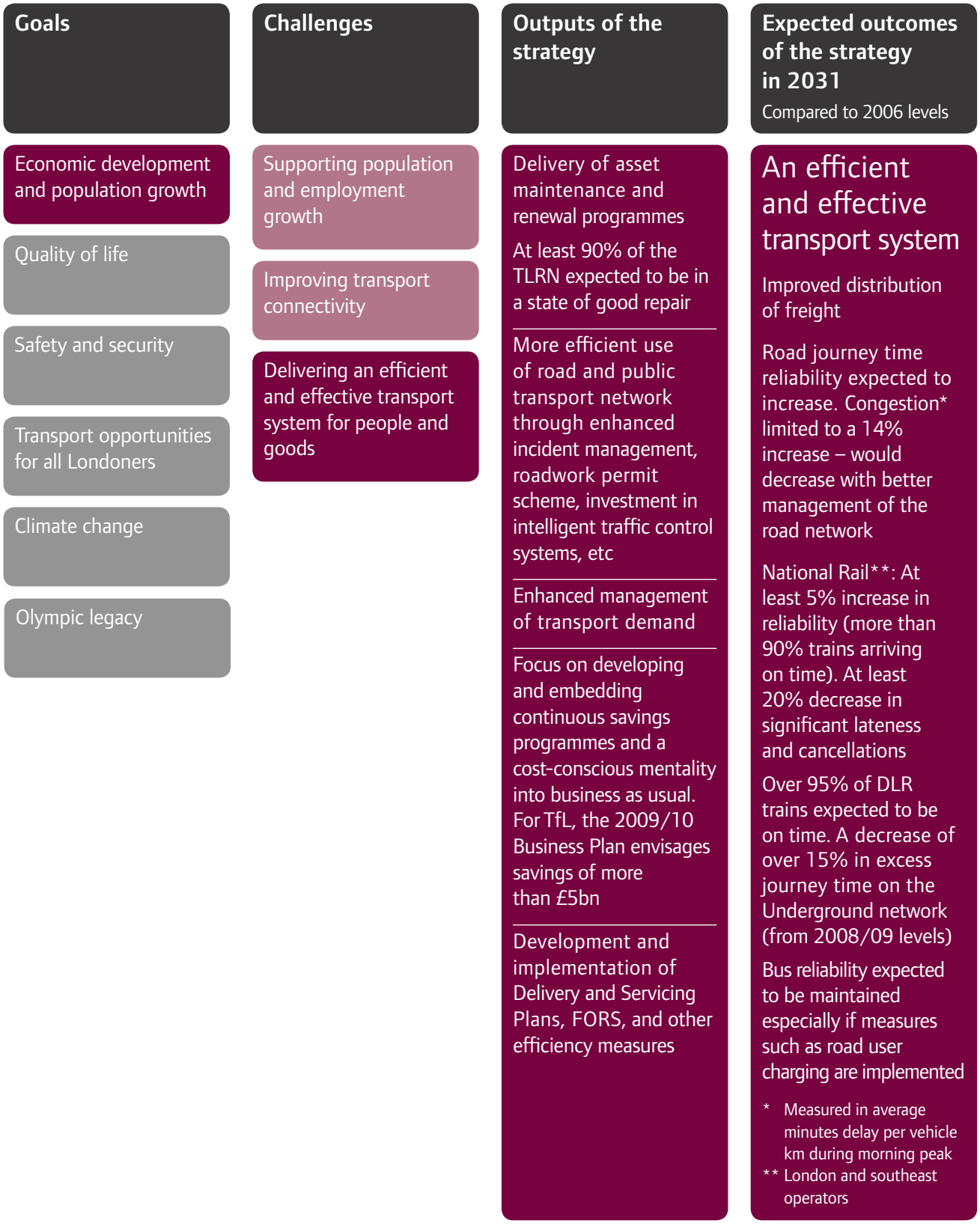
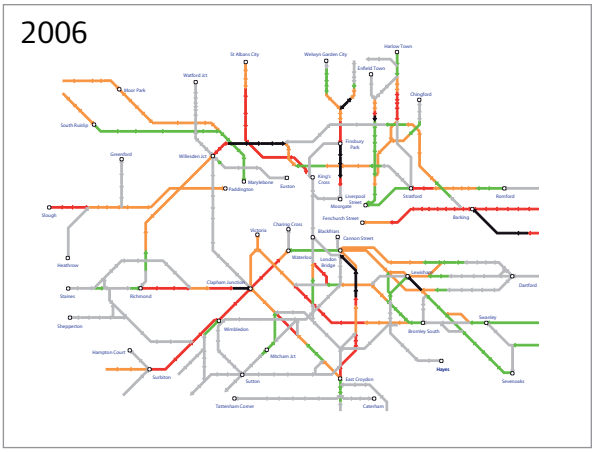


Figure 70: Anticipated change in crowding levels on the National Rail network by 2031 with the strategy



Standing passengers per sq metre

- < 1 standing per sq metre
- 1–2 standing per sq metre
- 2–3 standing per sq metre
- 3–4 standing per sq metre
- > 4 standing per sq metre

This schematic map does not include all details of the network

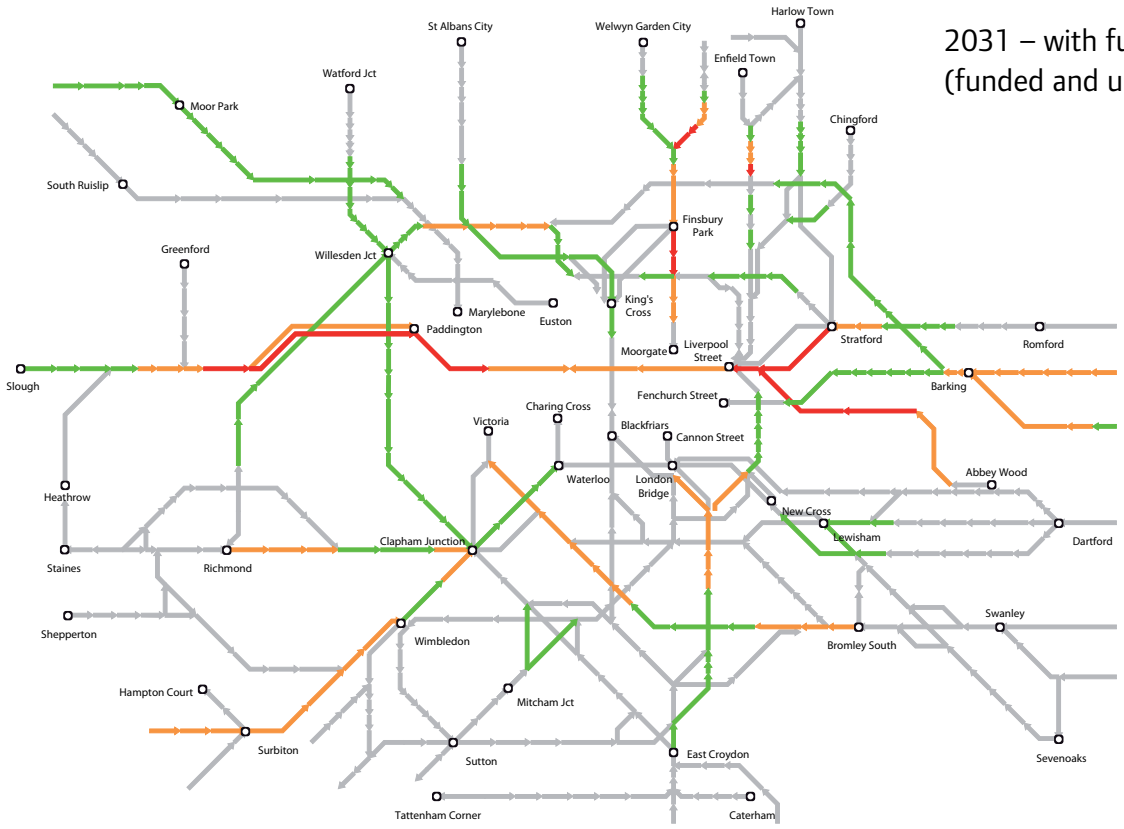
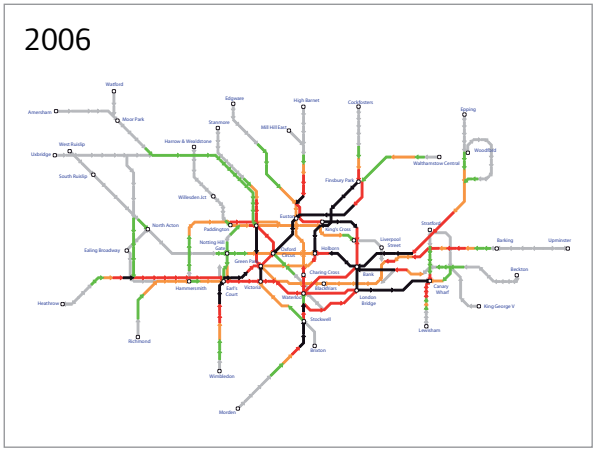


Figure 71: Anticipated change in crowding levels on the Tube and DLR network by 2031 with the strategy



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This schematic map does not include all details of the network

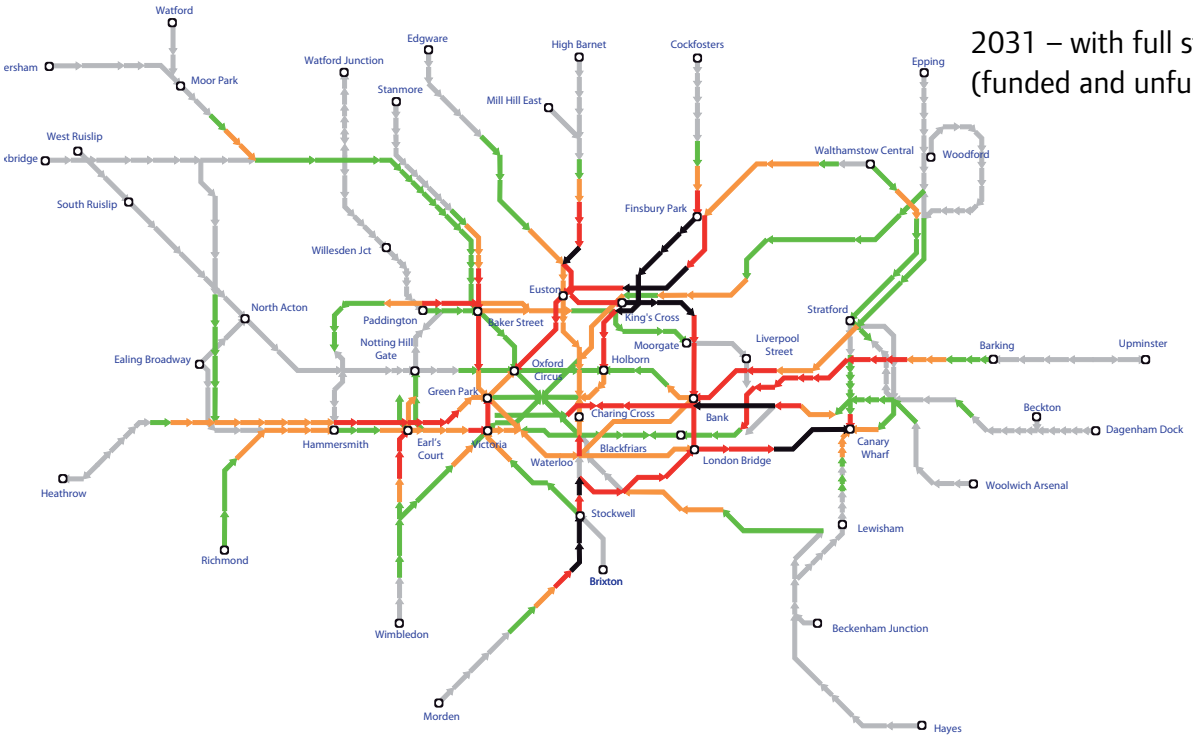

Figure 72: How the strategy will improve journey experience

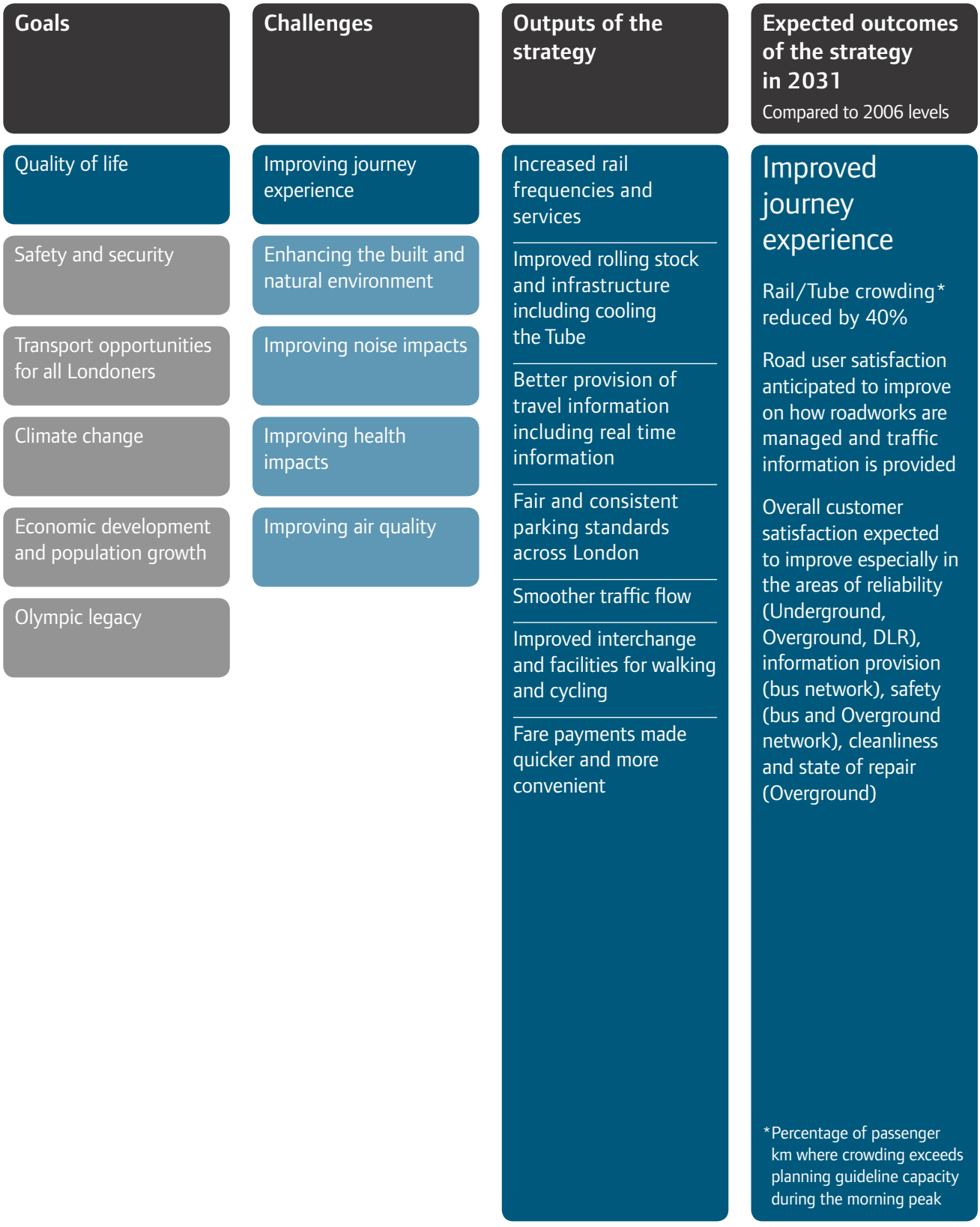

Figure 73: How the strategy will enhance the built and natural environment

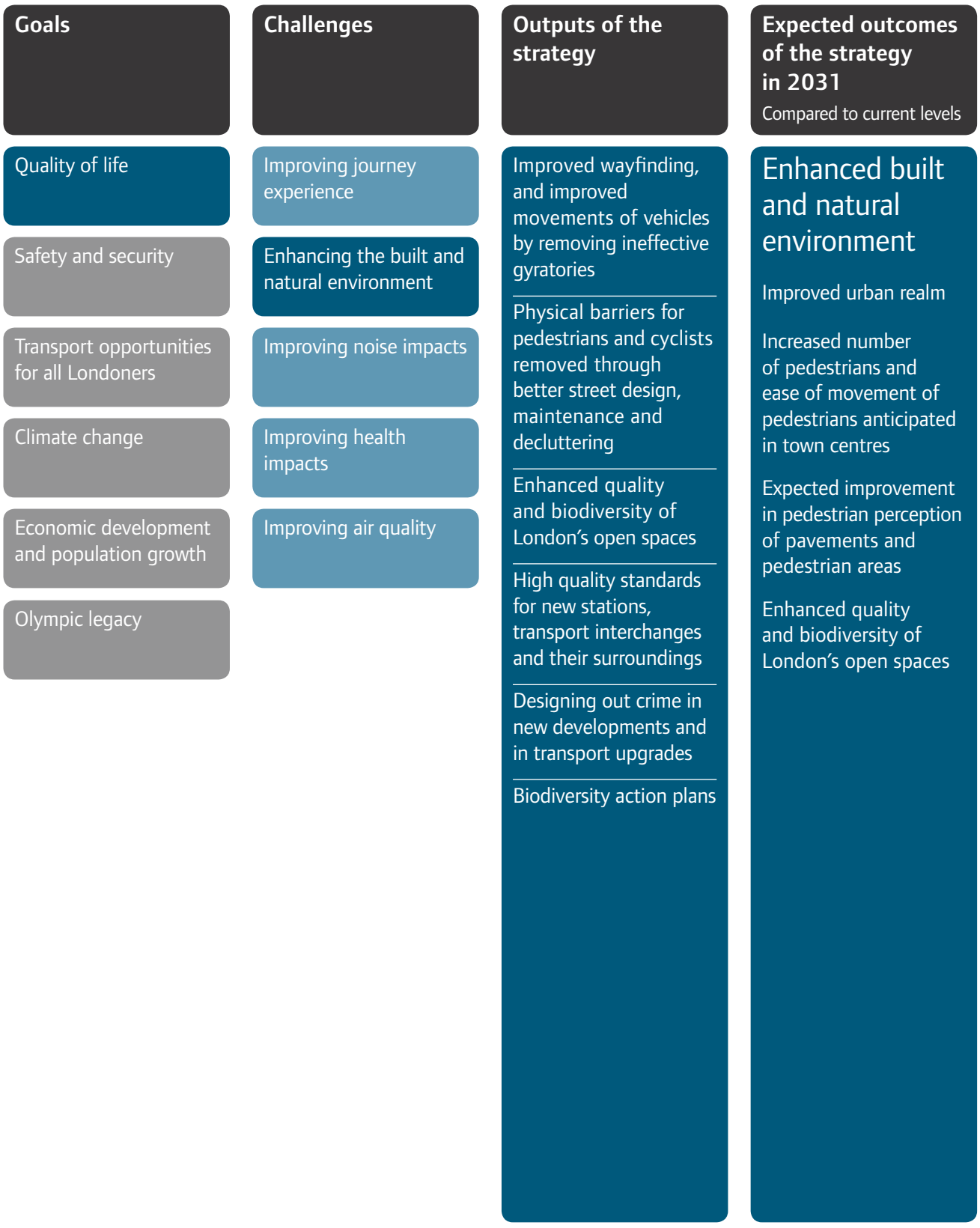

Figure 74: How the strategy will improve noise impacts

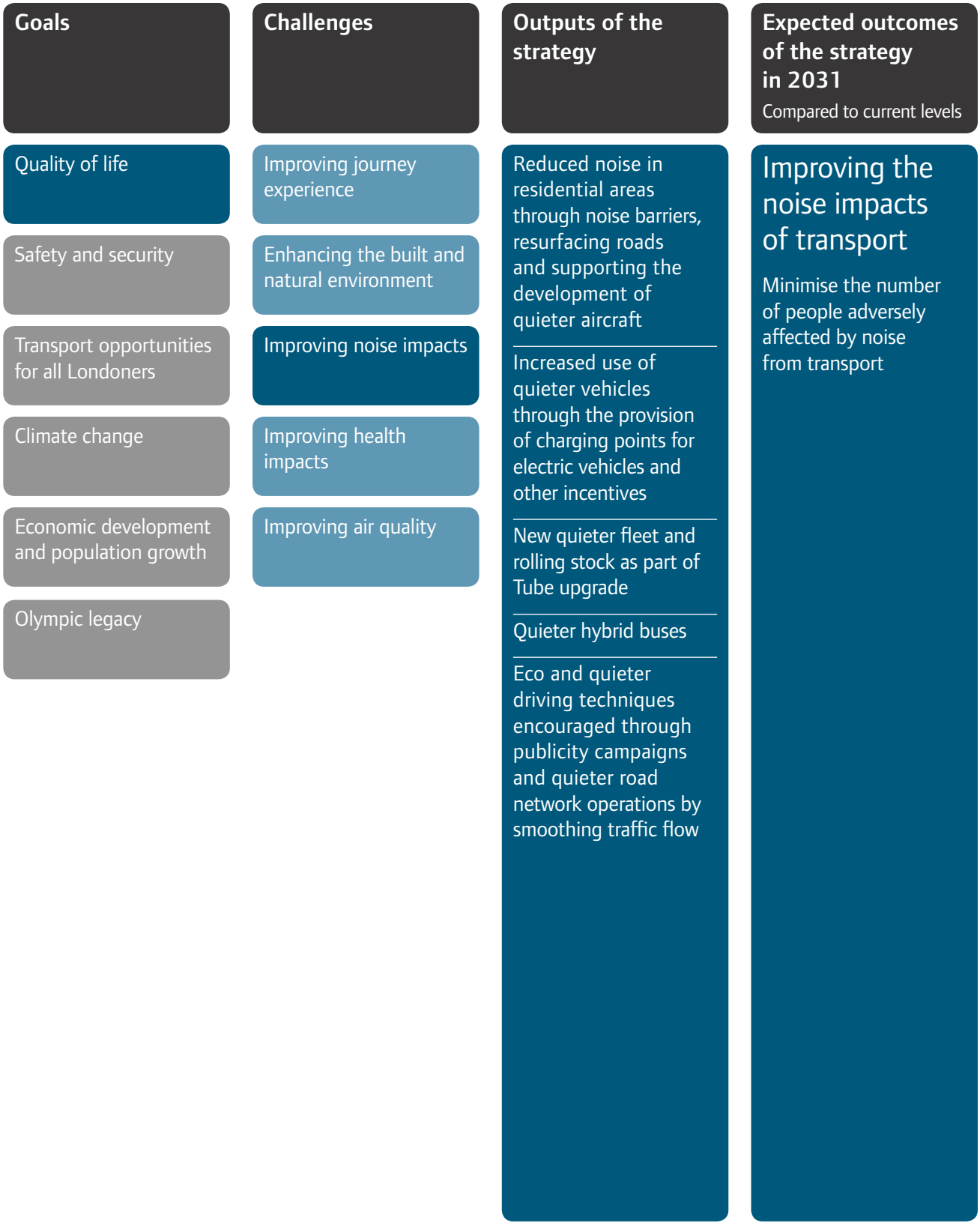

Figure 75: How the strategy will improve health impacts

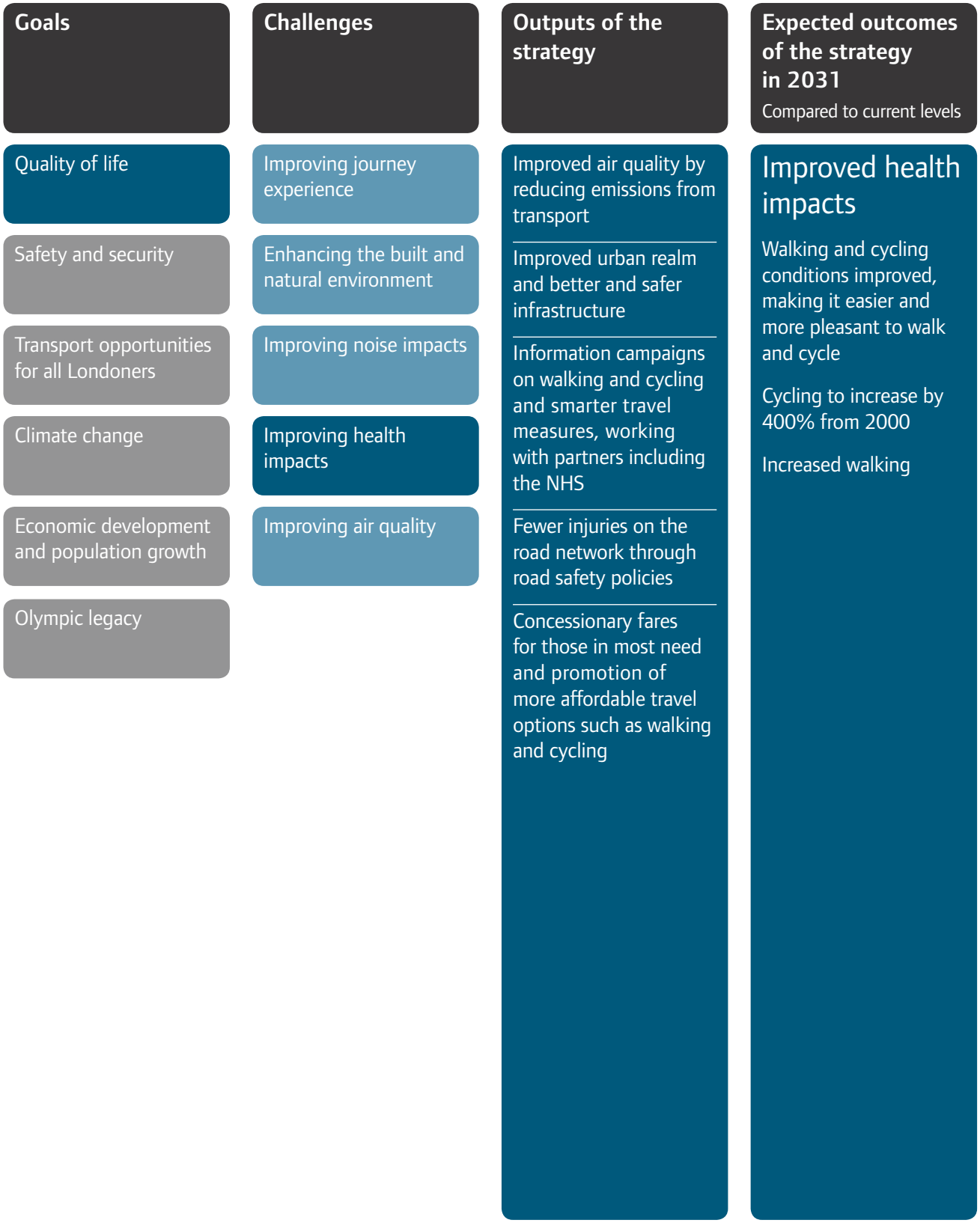

Figure 76: How the strategy will improve air quality

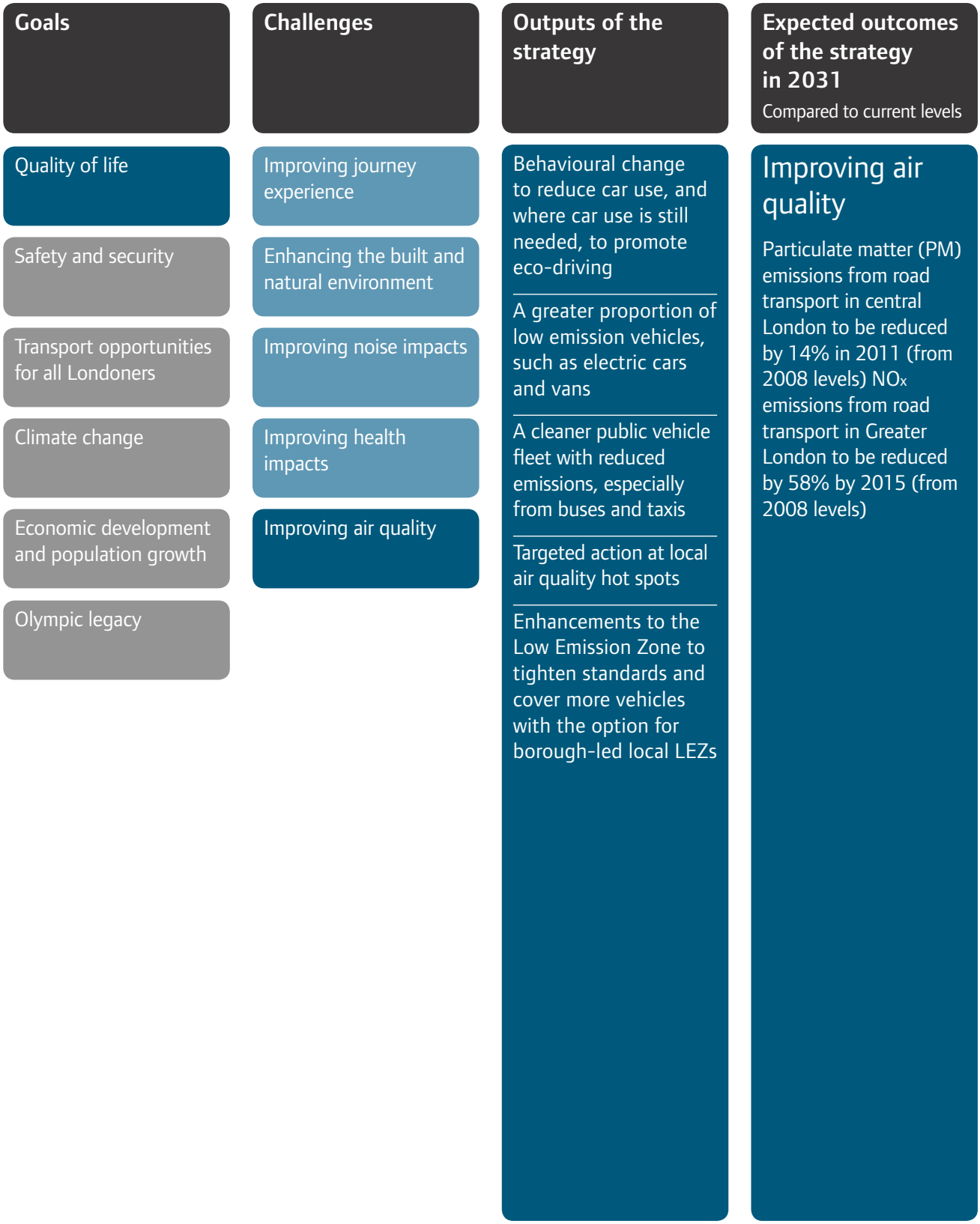

Figure 77: How the strategy will reduce crime, fear of crime and antisocial behaviour

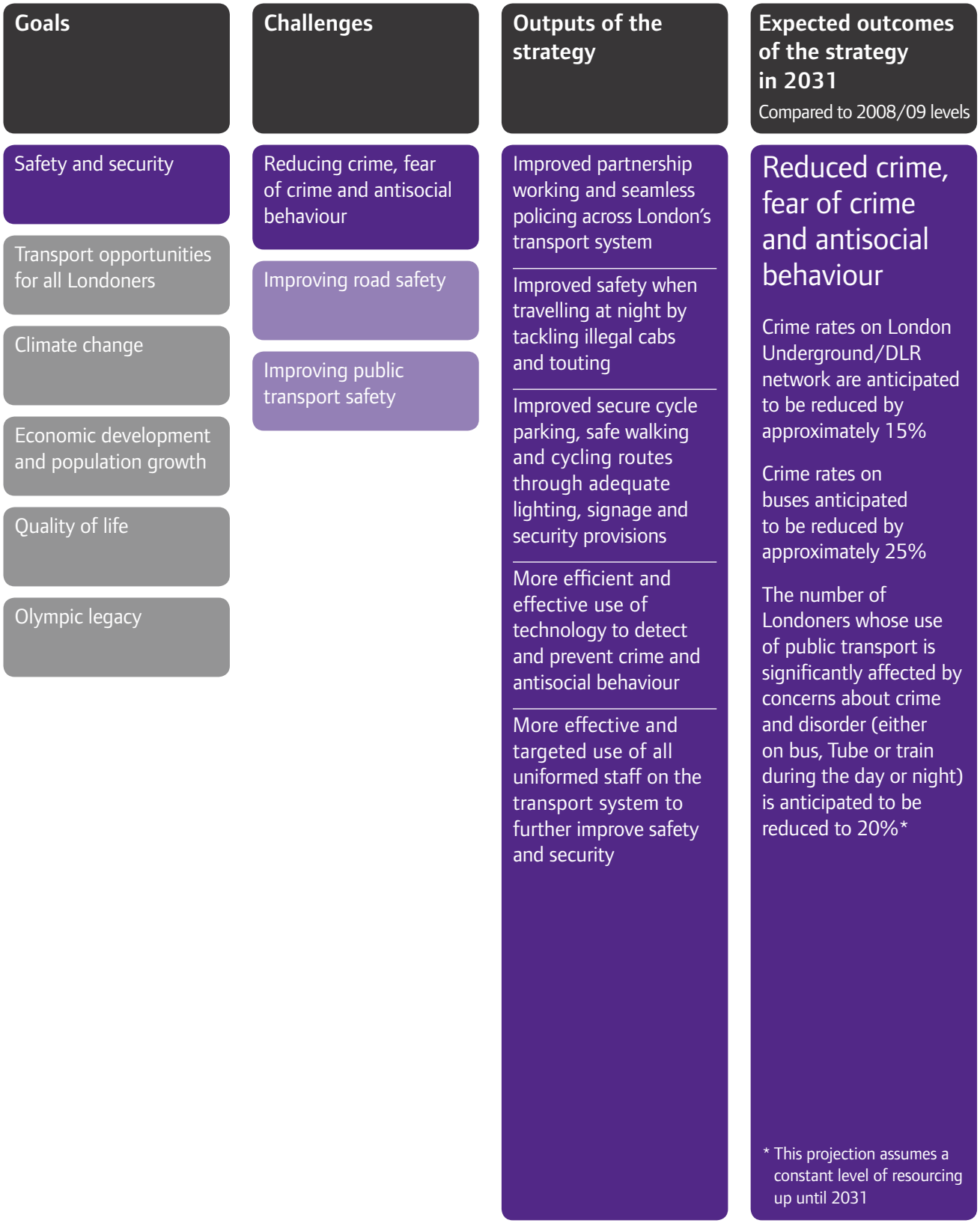

Figure 78: How the strategy will improve road safety

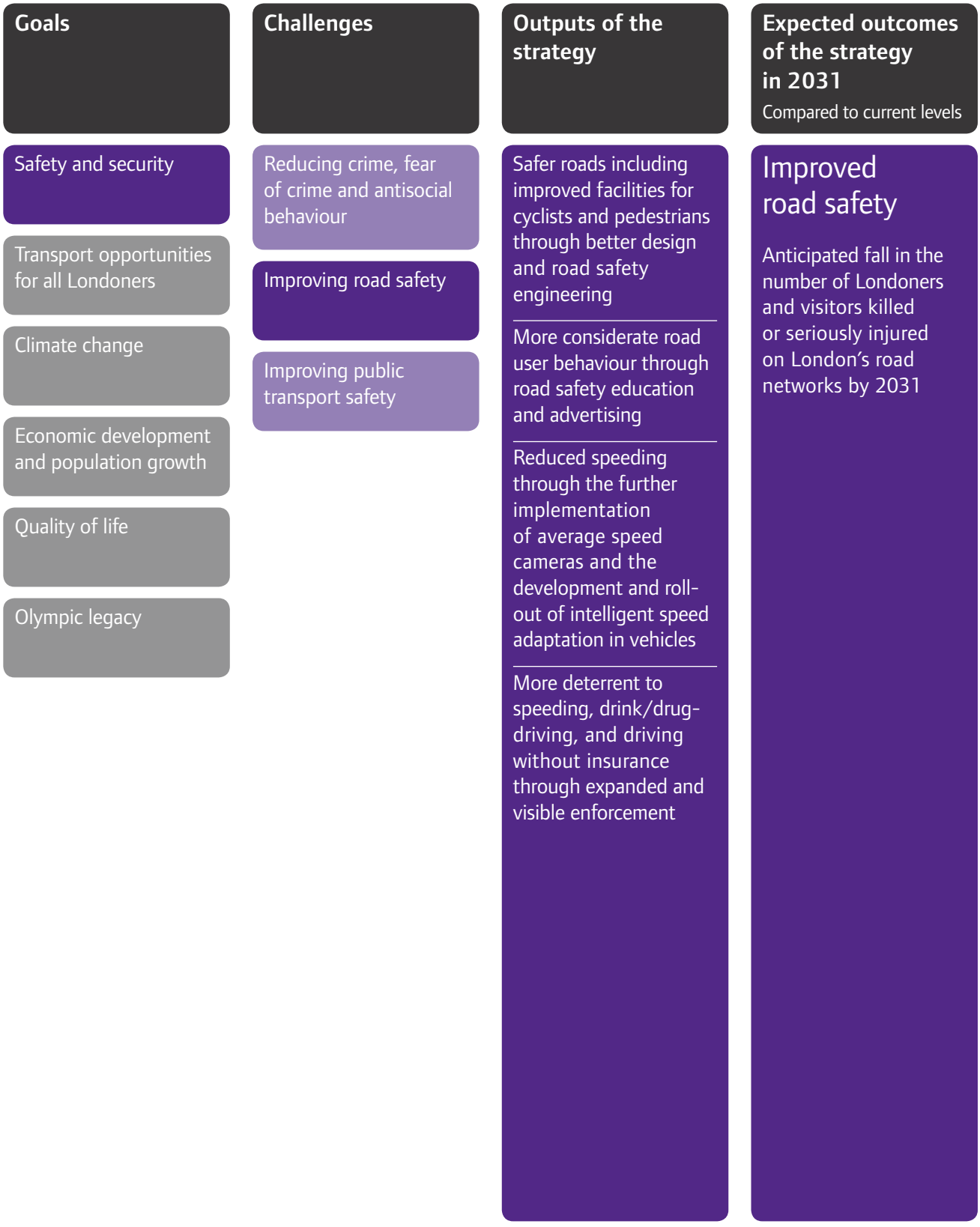

Figure 79: How the strategy will improve public transport safety

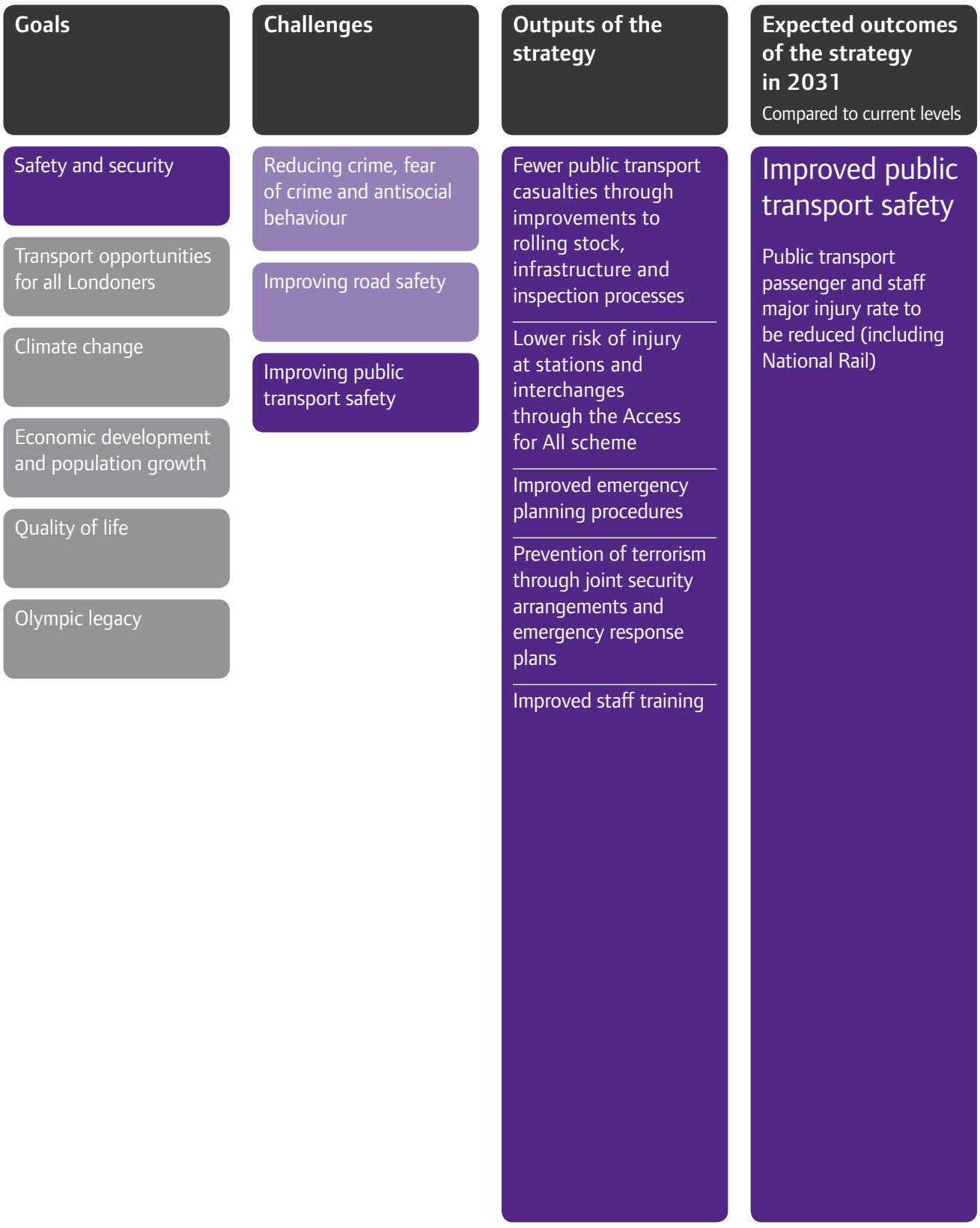

Figure 80: How the strategy will improve accessibility

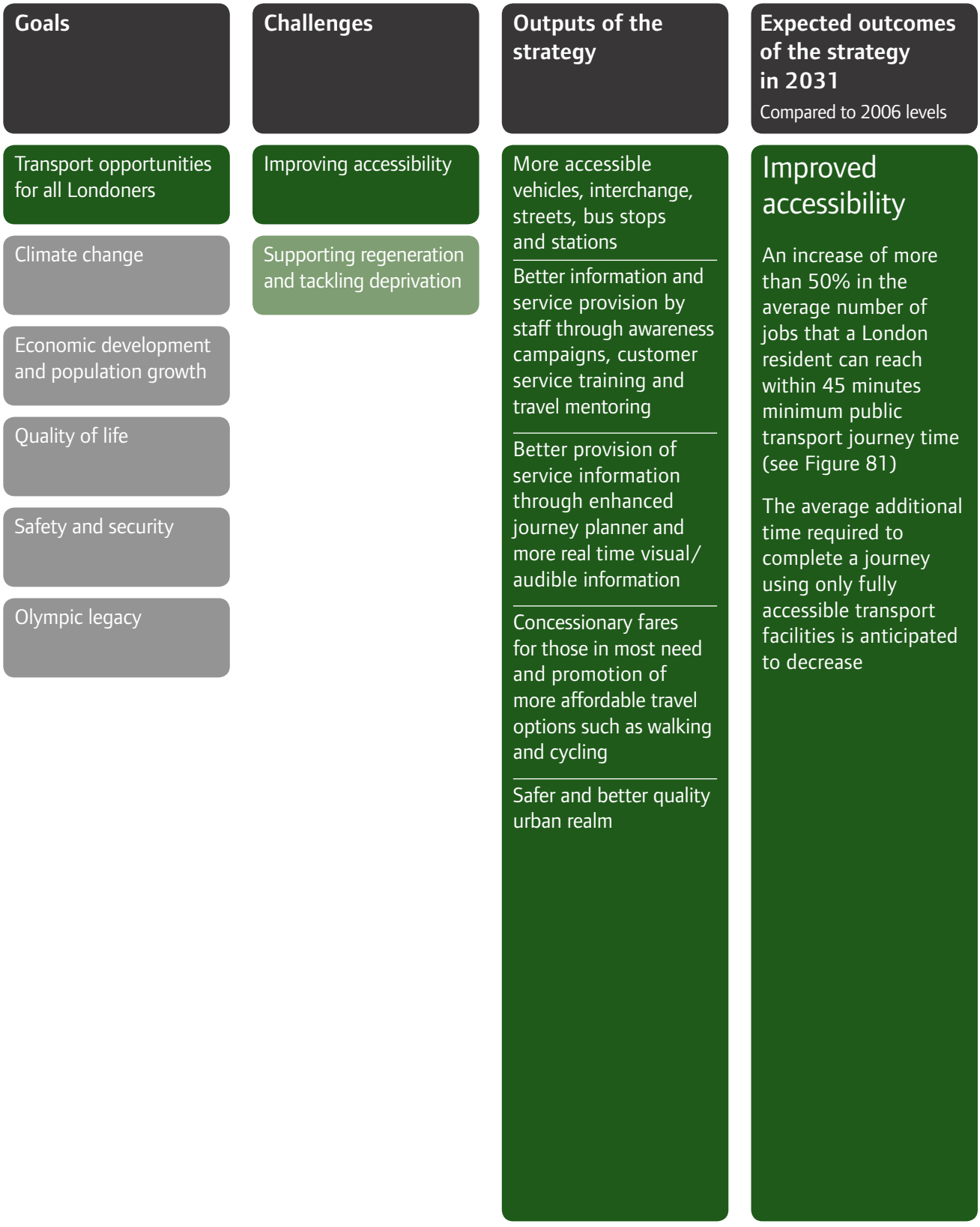

Figure 81: Anticipated difference in access to jobs between 2006 and 2031

The strategy will support London's economic development by increasing the number of jobs accessible by transport within 45 minutes. This will increase the pool of potential employees available to London's businesses and improve the employment opportunities available to Londoners

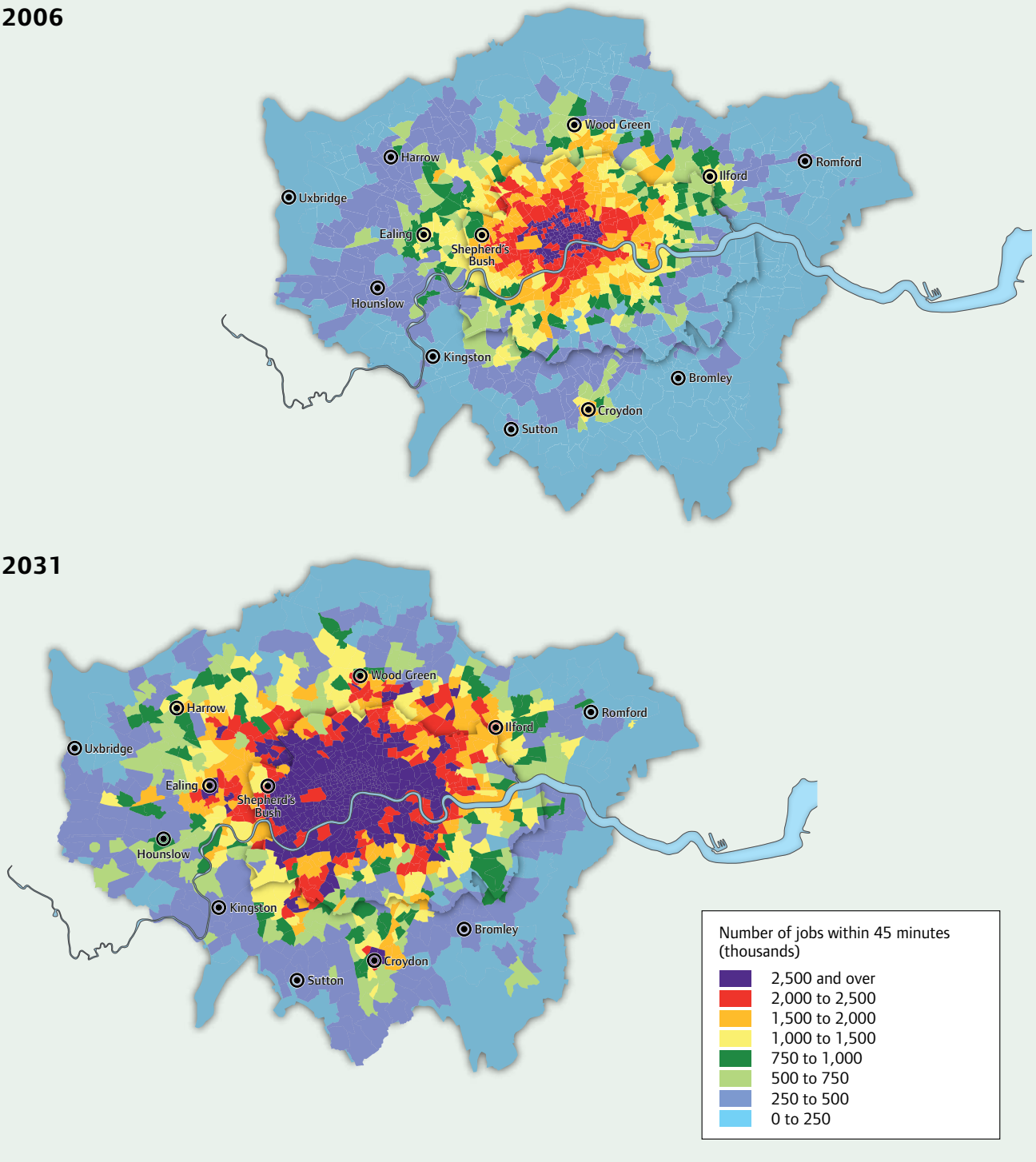

Figure 82: How the strategy will support regeneration and tackle deprivation

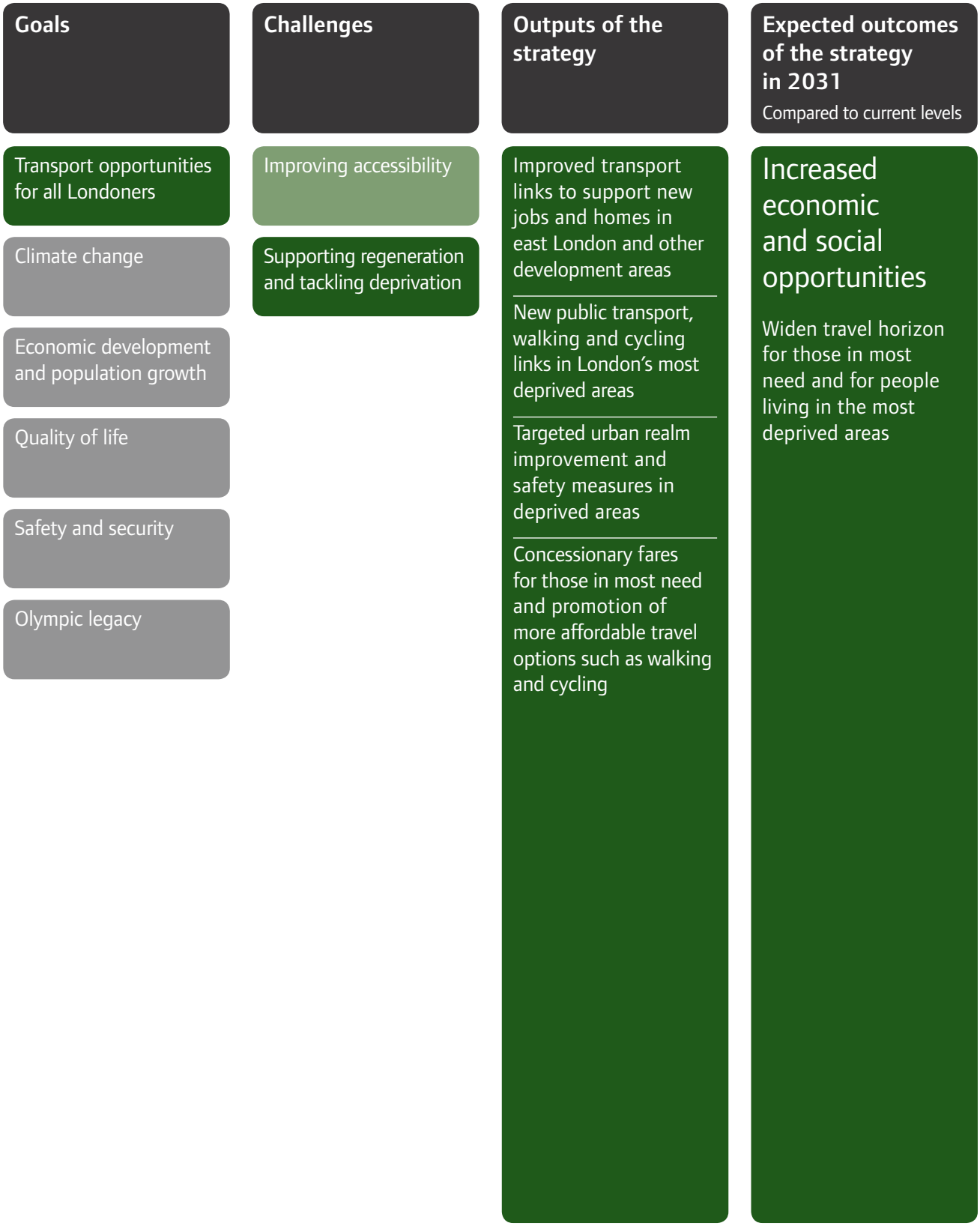

Figure 83: How the strategy will reduce ground-based transport CO_2 emissions

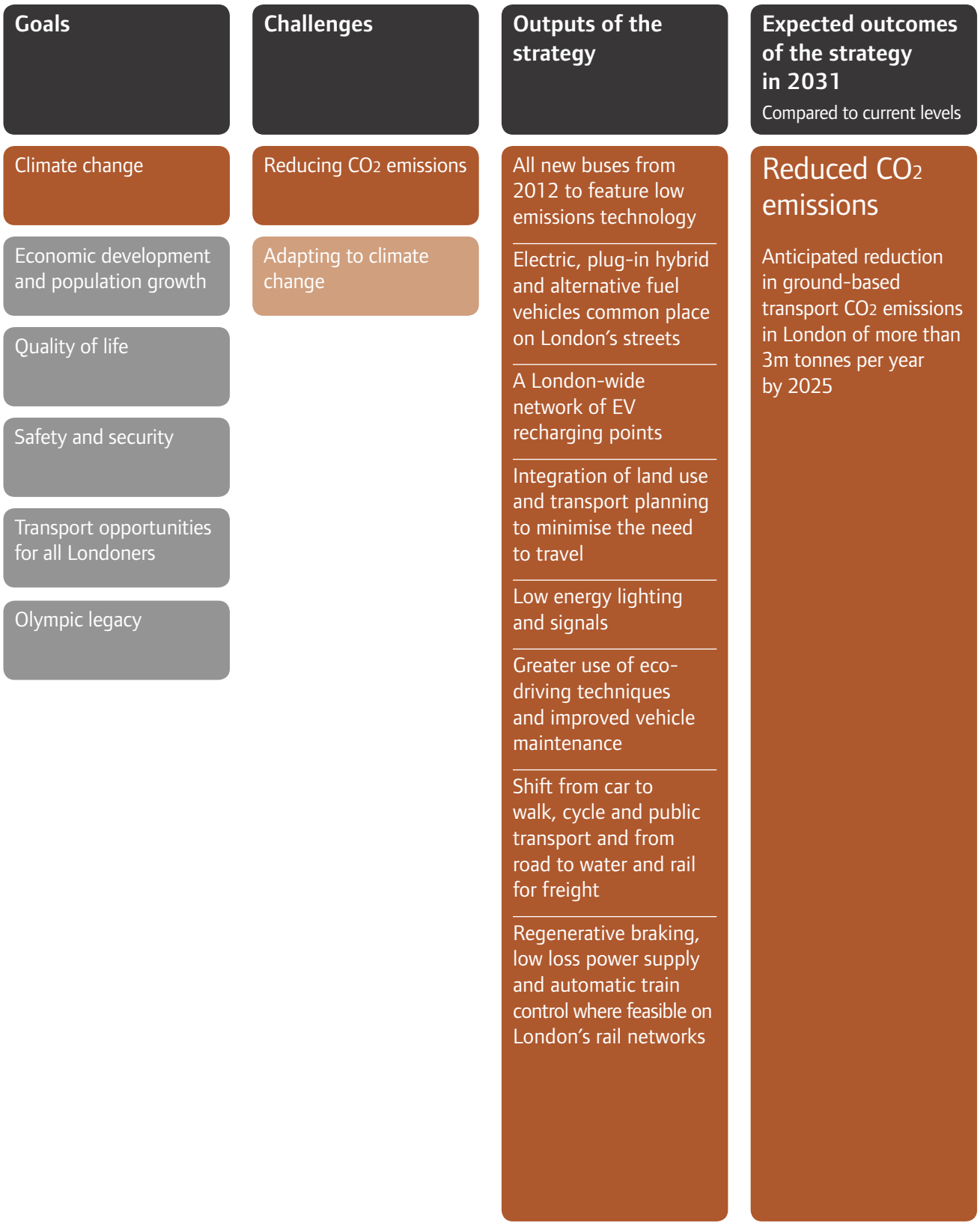

Figure 84: How the strategy will support adaptation to climate change

Figure 85: How the strategy will support the Olympic legacy