Traffic modelling undertaken for OSD

Traffic modelling: 4 Stage process – Base 2016, Baseline 2018, Future Base 2021, Proposed Scheme 2021

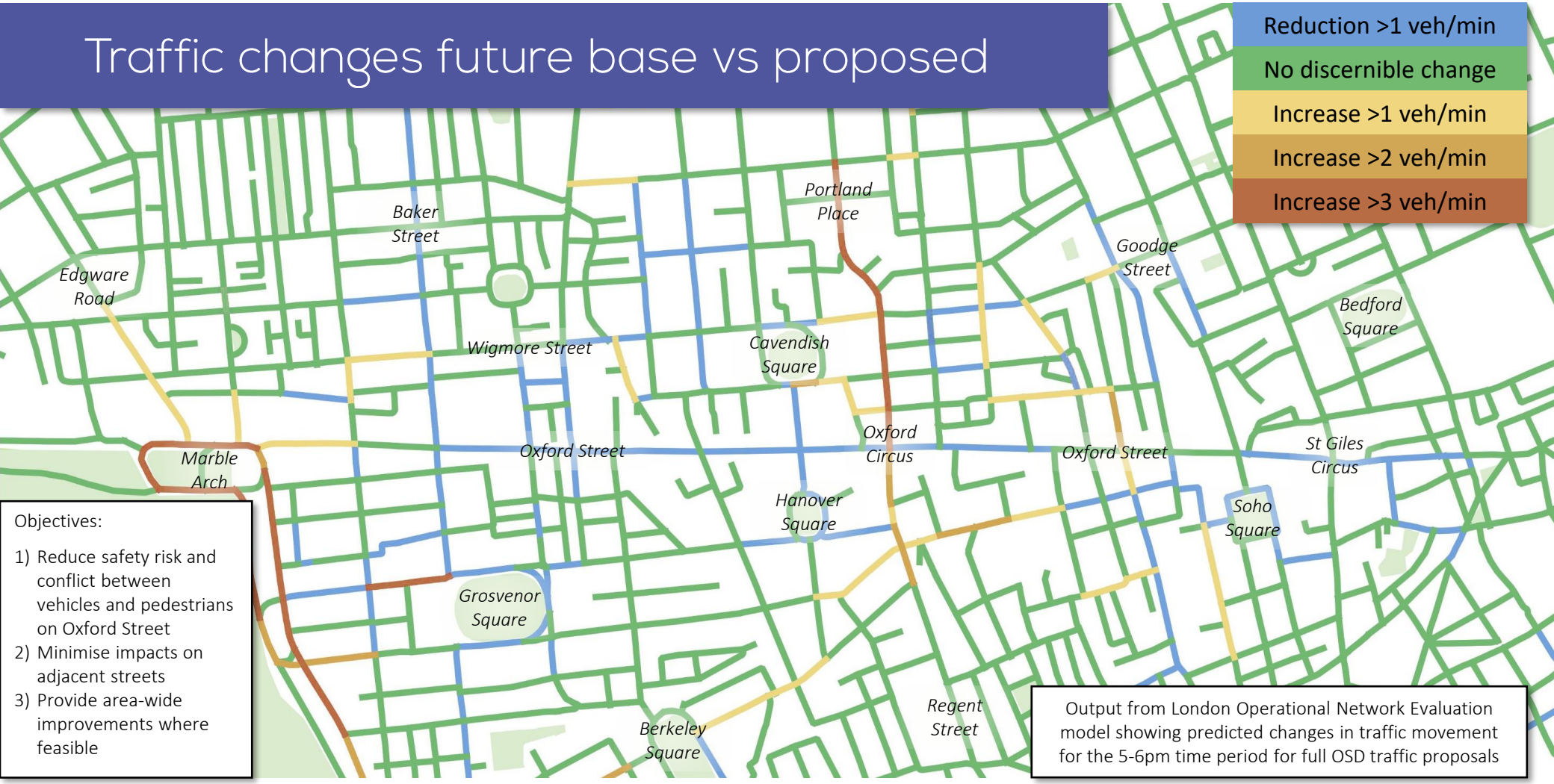
- Traffic signal method of control design 50+ traffic signal sites where changes are proposed to manage and improve network operation
- LinSig junction capacity modelling - 4 stage – District wide – all traffic signal junctions
- VISSIM microsimulation network modelling - 4 Stage - 2x Area models + 1x Corridor
- TfL ONE modelling (London Operational Network Evaluation model) – 3 Stage - londons-strategic-transport-models.pdf (tfl.gov.uk)

All traffic models have been developed by experienced consultant teams with a track record for accuracy and reliability proven by previous major schemes delivered in Westminster and Central London boroughs. TfL in its statutory role as network manager has reviewed in detail and approved all traffic modelling prepared for the scheme through its industry leading model audit process.

NORMAN ROURKE PRYME

City of Westminster

Traffic changes future base vs proposed



Objectives:

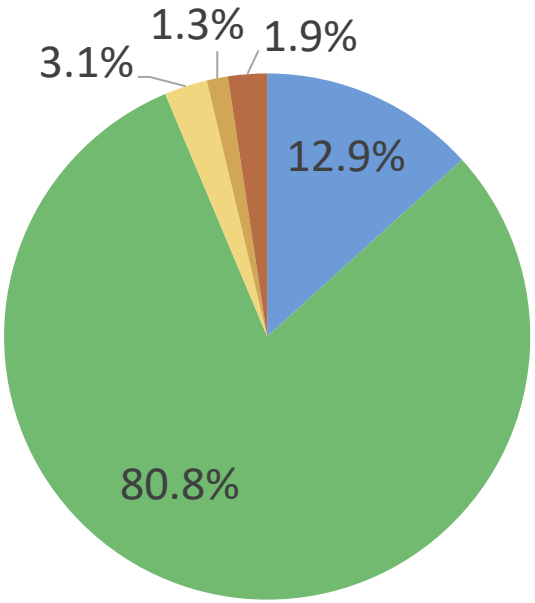
1) Reduce safety risk and conflict between vehicles and pedestrians on Oxford Street
2) Minimise impacts on adjacent streets
3) Provide area-wide improvements where feasible

Output from London Operational Network Evaluation model showing predicted changes in traffic movement for the 5-6pm time period for full OSD traffic proposals

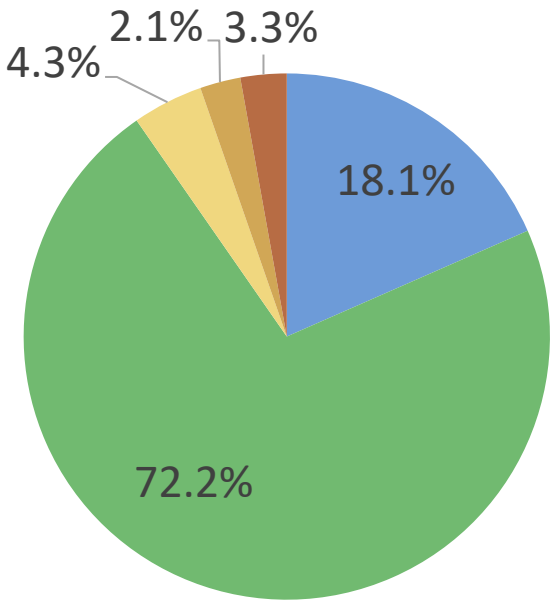
Traffic changes future base vs proposed

Reduction >1 veh/min
No discernible change
Increase >1 veh/min
Increase >2 veh/min
Increase >3 veh/min

OSD AM peak predicted traffic changes



OSD PM peak predicted traffic changes



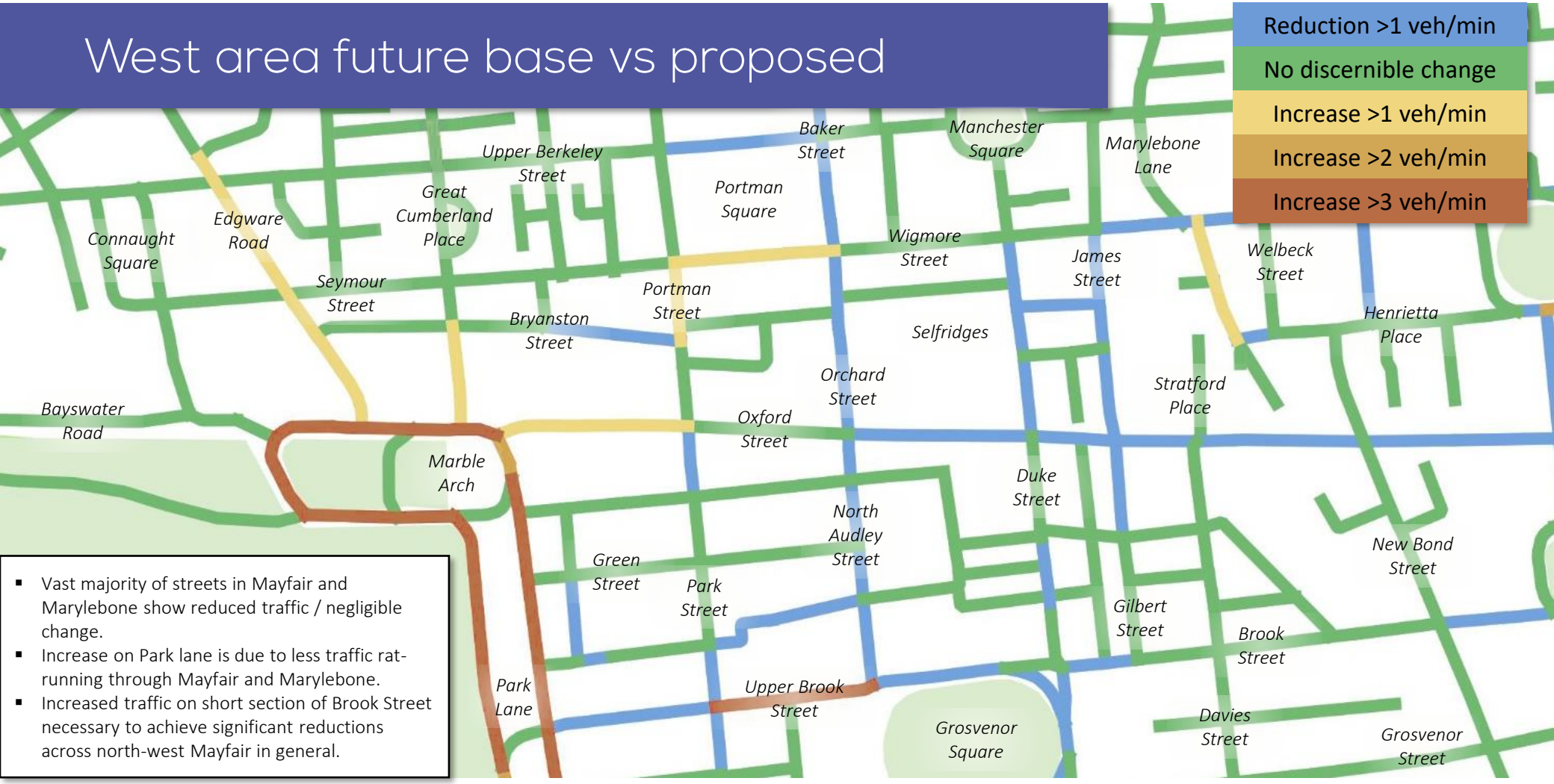
Summary of all traffic changes across the district – London Network Evaluation Model

The vast majority of streets experience a reduction or negligible change in traffic as a result of OSD proposed scheme traffic changes

A small number of streets will see minor increases that are expected to be balanced by future traffic management schemes

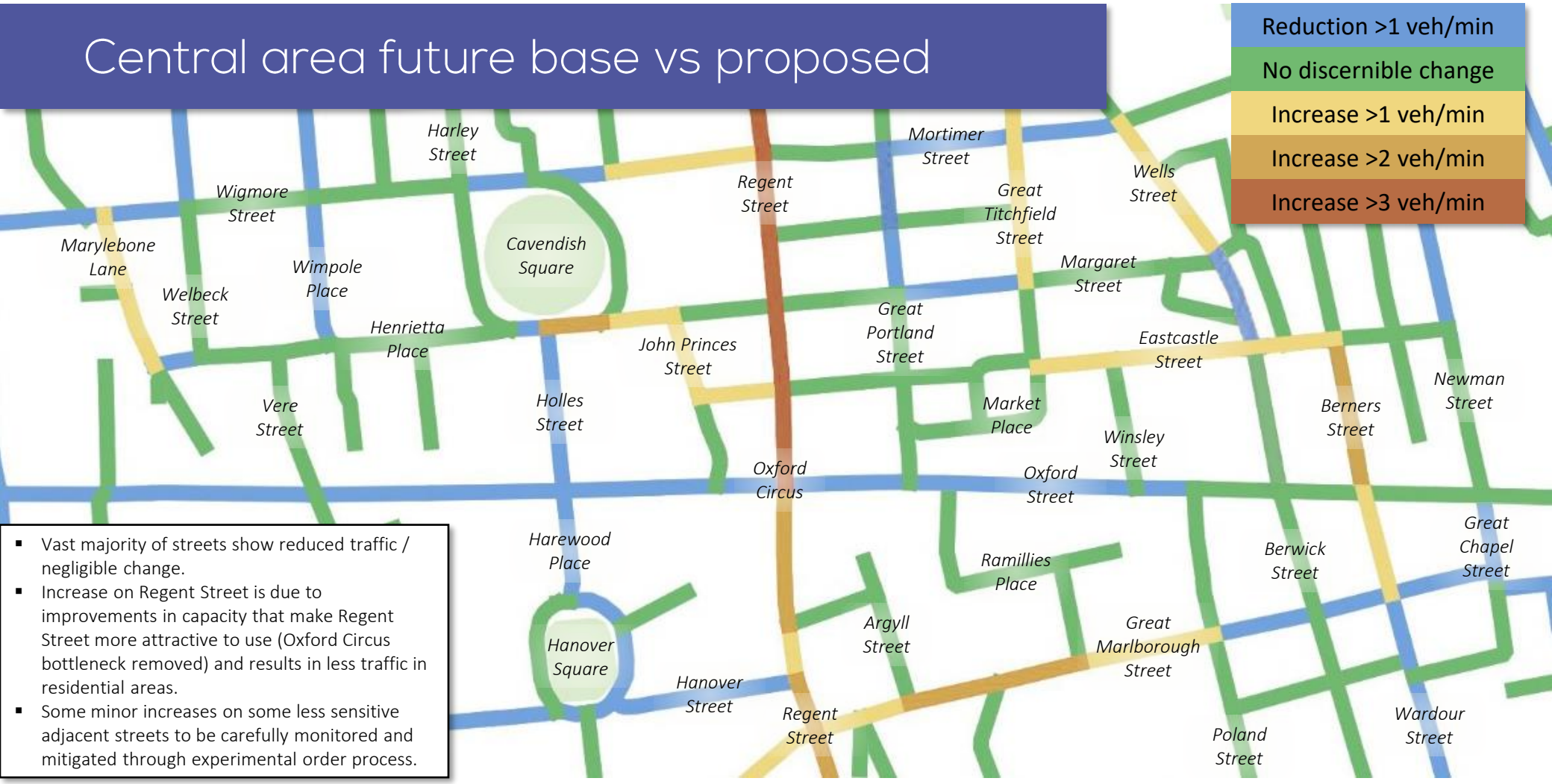
Only three locations where more significant increases in traffic are expected. These increases are all a result of achieving significant reductions in adjacent residential areas

West area future base vs proposed



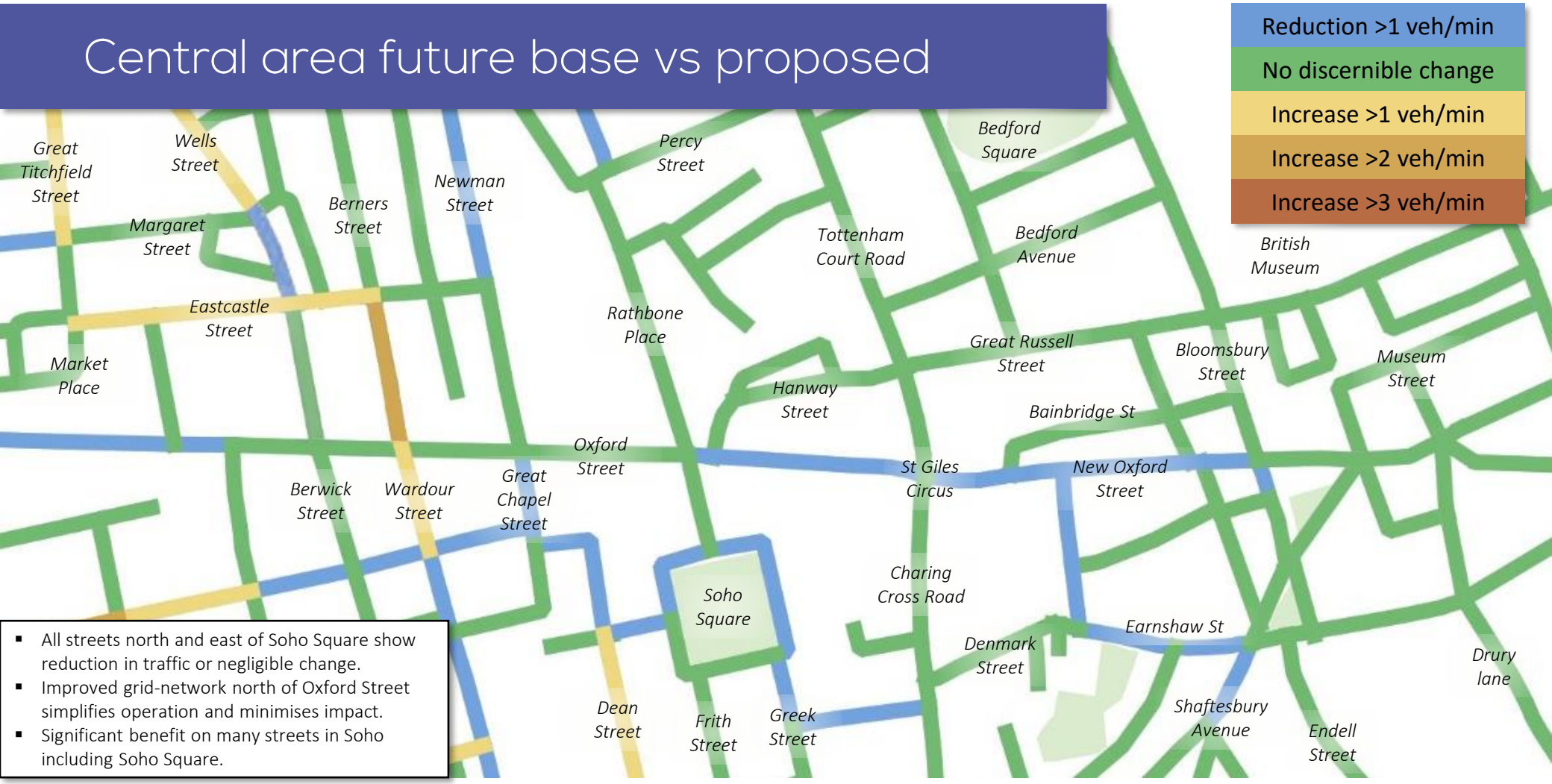
- Vast majority of streets in Mayfair and Marylebone show reduced traffic / negligible change.
- Increase on Park lane is due to less traffic rat-running through Mayfair and Marylebone.
- Increased traffic on short section of Brook Street necessary to achieve significant reductions across north-west Mayfair in general.

Central area future base vs proposed



- Vast majority of streets show reduced traffic / negligible change.
- Increase on Regent Street is due to improvements in capacity that make Regent Street more attractive to use (Oxford Circus bottleneck removed) and results in less traffic in residential areas.
- Some minor increases on some less sensitive adjacent streets to be carefully monitored and mitigated through experimental order process.

Central area future base vs proposed



- All streets north and east of Soho Square show reduction in traffic or negligible change.
- Improved grid-network north of Oxford Street simplifies operation and minimises impact.
- Significant benefit on many streets in Soho including Soho Square.