



York Civic Trust

York's Local Transport Strategy Developing a Movement and Place Plan 18th January 2024

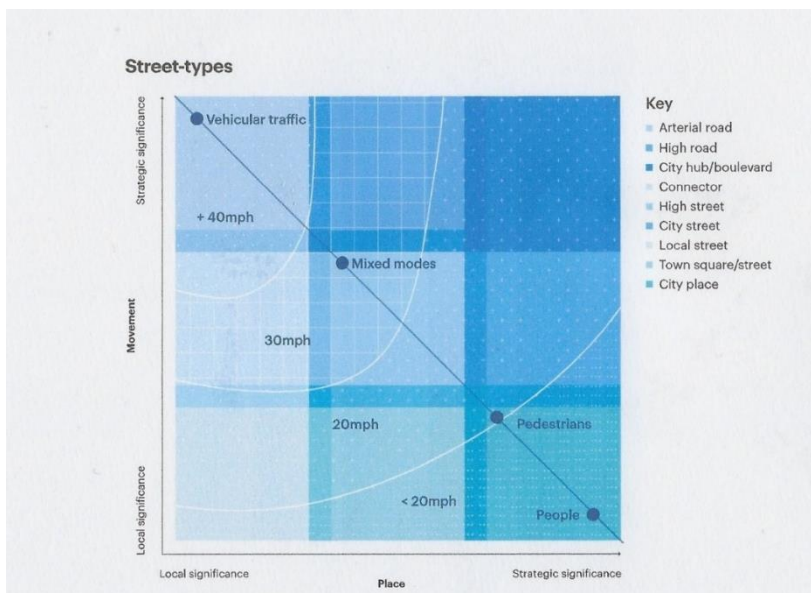
This note has been prepared as a contribution to discussions at the meeting of City of York Council's Local Transport Strategy Expert Panel on 24th January.

A key element in the Council's draft Local Transport Strategy is the creation of a Movement and Place Plan. The concept draws on work by Professor Peter Jones of UCL, who pointed out that any street has two conflicting uses; as a route for movement and as a place to be, and that action is needed to redress any imbalances in these two roles.

This has led to a number of initiatives:

- Transport for London's 2013 Roads Task Force
- Leicester's 2020 Street Design Guide
- Greater Manchester's 2023 Streets for All.

Each involves assessing each street in terms of its performance for Movement and for Place, and developing designs which improve both and redress any imbalances. The nine street categorisations in the Roads Task Force are shown below. Where possible, streets with



both intermediate to strategic movement and intermediate to strategic place should be avoided, and this will typically be done by relocating traffic movements. Thus streets in the second and third cells on the top row will be moved to the cells below them in the diagram, and Place will be enhanced on them.

Where this is not possible, it can be particularly challenging to design for improved Place. However, experience in

London suggests that it is always harder to design for improved Place than for Movement, given the traditional roles and expertise of traffic engineers.

The development of a Movement and Place Plan therefore raises a number of questions:

1. What should the objectives be?
2. Which streets should be assessed?
3. Who should carry out the assessment?
4. What measures might be used to modify Movement?
5. What approaches could be used to improve the design of Place?
6. How can the different categories of user be provided for in the resulting Plan?

This paper offers some answers to these questions, and summarises some initial work which York Civic Trust has been conducting to illustrate the approach.

What should the objectives be?

The Movement and Place Plan is one of ten Policy Focus Areas in the Council's draft Transport Strategy. Its description refers to the need to reduce congestion, improve the environment (including reducing carbon emissions) and improve access, both for residents whose access is poor and to support the economy. However, the Local Transport Strategy also includes other relevant objectives such as improving public health, increasing safety and security and protecting heritage and public space. An enhanced approach to designing for Place should help address all of these objectives.

Which streets should be assessed?

Transport for London has apparently asked London Boroughs to assess every street. This seems unnecessary, and we suggest a more focused approach. There are a number of attributes which might suggest the need to assess a street, including:

- streets with high levels of pollution
- streets with higher casualty rates, or which feel unsafe
- streets passing heritage locations
- streets used for through movement in residential areas and past schools
- shopping streets used for through movement
- streets with high levels of congestion
- streets where it proves difficult to provide for active travel.

Many of these categories can be identified from data readily available to the Council, but some involve qualitative judgment. It might be appropriate to invite ward and parish councils to identify streets which are of concern to them.

Who should carry out the assessment?

Given the range of interests to be served by a Movement and Place Plan, it might be appropriate to establish a working group to carry out the assessment, with inputs from resident groups, modal interest groups, schools, retail interests, public transport and freight operators as well as Council officers and councillors. Whoever is involved in the working group, it would be worthwhile to seek training from a city which is already active in the subject area, such as Leicester or London.

What measures might be used to modify Movement?

Many of the Policy Focus Areas in the Council's draft Transport Strategy, such as improvements in walking, cycling and public transport, reducing car dependency and

managing freight and logistics might be expected to reduce the amount of traffic on York's street network. With this in mind, the Council proposes a target of a 20% reduction in car use by 2030. But there are also a number of traffic management measures which could contribute directly, and our early work outlined below has started assessing some of these. Our overall list includes:

- bus gates and point closures
- reduced crossing delays for pedestrians
- reversion to two way operation, particularly on gyratories
- new signalised junctions to assist pedestrians
- 20mph limits
- reallocation of road space to users higher in the hierarchy
- inbound gating on outer radials
- traffic cells as employed in Ghent and Gothenburg.

In principle, additions to network capacity, such as the proposed dualling of the northern outer ring road, can contribute. But evidence suggests that, unless measures as listed above are adopted in parallel, additional capacity will principally attract additional traffic.

What approaches could be used to improve the design of Place?

As noted above, design for Place requires a different skill set from that for design for Movement, and it will be important to draw on those who have the appropriate skills in urban design. As with Movement, an important starting point is to assess what is currently wrong with the design for Place. Perhaps the most useful guide for this is Transport for London's Healthy Street Toolkit, which assesses each street in terms of ten criteria, as shown in the diagram below. We suggest that the working group established to select the



streets of interest then uses the Healthy Street Toolkit to assess each selected street, again drawing on appropriate training. This will help in identifying the features to be incorporated into the improved Place. This can then provide a brief for appropriately skilled consultants. We suggest that the Council might complete one exemplar assessment and design during 2024, as an indication of what might be achieved. We would be happy to offer our proposals for Gillygate as an input to that process.

How can the different categories of user be provided for in the resulting Plan?

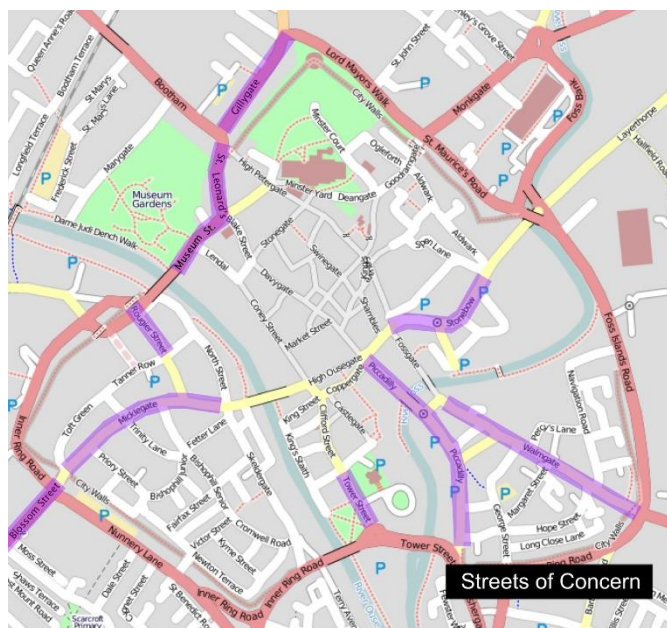
It has been suggested that a separate network plan for each mode of transport should be a key element of the Movement and Place Plan (Policy Idea 6.1). While this may be of some help, these network plans should be largely self-evident:

- for pedestrians they should include all roads and off-road paths; the priority walking network is to be a key element of the LCWIP
- for wheelchair users there might be a case for developing a network indicating where they can (or should be able to) move unhindered; there might be a case for a similar network for those with sight loss
- for cyclists the cycle network is already publicised, and is to be updated in the LCWIP
- for freight there is a case for specifying a network where freight vehicles are permitted and, more specifically, a much more limited network for those over 7.5T
- for other private vehicles the network will include all roads, with the exception of streets where they are excluded at all times.

We recommend, therefore, clarifying the networks for disabled people and for freight, but otherwise focusing on changing the balance of use in individual streets.

The Trust's exploratory analysis

In preparation for the development of the Movement and Place Plan, York Civic Trust has provided some initial answers to questions 1, 2 and 4 above, and assessed a fairly radical set of bus gates and point closures as an indicator both of what might be achieved and of the process which might be adopted. As part of the process, we have identified a number of streets in the vicinity of the city centre where we are aware that the imbalance between Movement and Place is particularly severe, as shown below. We have then developed a



number of traffic management measures for remedying those imbalances, and tested a first set of measures with an earlier Council traffic model to which we have access. A full report of our findings can be provided if required.

We have not endeavoured to enhance the design of Place, but the Trust's earlier proposals for Exhibition Square, Bootham Bar and Gillygate are an example of what could be achieved.

The model which we have used

We have used the Council's SATURN model which we were first given in

2016, and which we have updated to reflect network changes since. It is important to note that the morning and evening peak trip matrices, which represent travel demand, are still based on 2014 data. Our results can therefore only be considered as broadly indicative of

what might happen were these measures to be implemented today. The most promising options will need to be tested further with the Council's new strategic model.

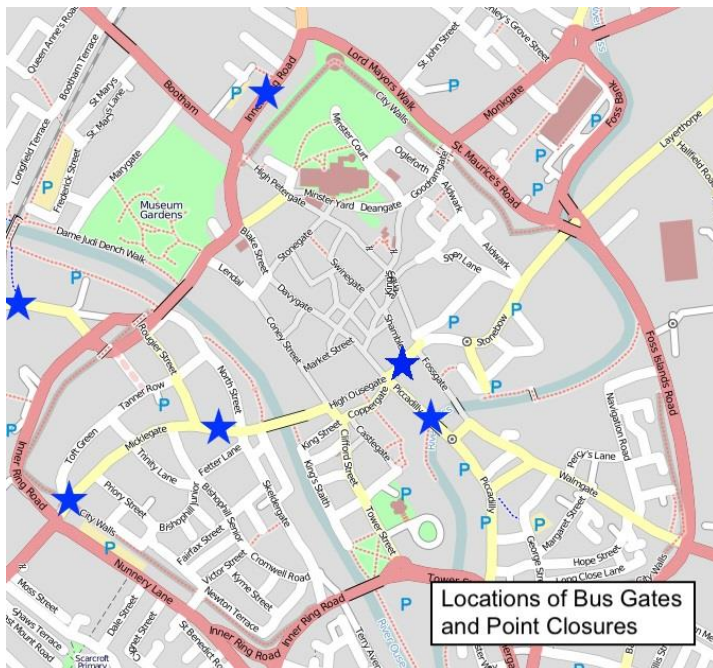
Objectives and metrics

We have used the objectives listed above, and measured:

- average flow (vehicle-km) on different areas of the network
- average network speed on different areas of the network
- two way hourly flows on those streets around the city centre which we consider particularly sensitive
- travel time in seconds on selected routes
- number of links (approaching junctions) which are above capacity by area
- carbon emissions.

The measures tested

We have focused initially on a set of bus gates and point closures, many of which are proposed in the City Centre Bus Access Study (see below). Not shown in Figure 2 are a bus gate on Crichton Avenue and point closures on Mill Lane and Dodsworth Avenue.



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The testing process

We have tested this package of measures:

1. on its own and with no change in overall number of journeys
2. as (1) with the upgrading of the outer ring road
3. as (1) with the number of journeys falling in response to increases in travel time
4. as (1) with a 20% reduction in car journeys (a key target in the Strategy).

Policy implications

The results suggest that:

- with the measures alone (test (1)):
 - overall flows rise by 4% as a result of re-routing
 - average flows rise by 10% on the ring road and fall by 18% in the city centre
 - average speeds fall by 8%, but by more than this in the city centre
 - flows on streets of concern fall by between 22% on Blossom St and 95% on Gillygate, but rise slightly on Walmgate and St Leonard's Place
 - travel times on most radials change little, but increase on Wigginton Road
 - there is a substantial increase in congested links on the inner ring road and, in the morning peak, on the outer ring road, but reductions between them
 - CO₂ emissions increase by 5% as a result of longer journeys.
- With the upgrading of the outer ring road (test (2)):

- there is little impact on overall flows, with at most a 2% transfer to it from the area within
- flows on most streets of concern are similar to those in test (1)
- however, speeds rise and congestion falls on the outer ring road.
- with journeys falling in response to increases in travel time (test (3)):
 - overall flows return to those in the base
 - there is some further transfer to the outer ring road
 - flows on streets of concern are again similar to those in test (1)
 - impacts on speed and congestion are less marked than in test (1)
 - CO₂ emissions return to those in the base.
- with 20% less car travel (test (4))
 - average flows fall by 16%
 - average speeds are similar to the base
 - flows fall on all critical links
 - travel times fall on all radials except for Wigginton Road
 - there are fewer congested links, except on the inner ring road
 - CO₂ emissions fall by 15%.

Conclusions

The tests of this first set of measures show that it is possible to reduce flows substantially on the most sensitive streets in the network, without unduly affecting the majority of the rest of the road network. However, there are likely to be some adverse impacts, particularly on parts of the inner ring road and on Wigginton Road, for which other remedial measures will be needed. Dualling of the northern outer ring road appears to have little further impact either in reducing flows on sensitive streets or in offsetting the locally adverse impacts. The measures on their own lead to some increase in vehicle travel, and hence in CO₂ emissions; however, these changes no longer appear when an allowance is made for journeys falling in response to increases in travel time. Were a 20% reduction in car use to be achieved by other means, the benefits in terms of reduced flow on sensitive streets would be increased, and any adverse impacts would be much more limited.

We consider that this analytical approach offers the basis for a wider project to develop a Movement and Place Plan. It would be possible to apply it to other types of traffic management measure, as listed above, to other streets which are considered to be particularly sensitive, and for other metrics of concern, such as density of traffic. Further testing could be conducted using the model which we have available, but it is important to stress that the model can only be used to compare the relative performance of different packages of measures and of the specific measures within them. At an appropriate point the measures which appear to be performing best will need to be tested more fully using the Council's current strategic model.

Finally, we note that none of our analysis attempts to suggest how these sensitive streets might be improved once traffic on them is reduced. This will need to be done using an approach which focuses directly on design for Place. We recommend that early consideration is given to how design for Place might be progressed.