Transport and Environment Committee

10.00am, Thursday, 6 October 2022

Our Future Streets: Edinburgh's approach to a circulation plan

Executive/routine	Executive
Wards	All
Council Commitments	

1.   Recommendations

1.1   It is recommended that Transport and Environment Committee:

1.1.1   Notes that a key deliverable of the City Mobility Plan is to develop a strategic approach to allocating street space between different travel modes by the end of 2023;

1.1.2   Agrees to adopt a strategic approach to street space allocation, as set out in paragraphs 4.2 to 4.3 and in Appendix 2; and

1.1.3   Agrees to further develop the draft Framework, integrate this with relevant action plans, and note that proposals for joint consultation with the Active Travel Action Plan and the Public Transport Action Plan will be reported to Committee in December 2022.

Paul Lawrence

Executive Director of Place

Contact: Daisy Narayanan, Head of Placemaking and Mobility

E-mail: Daisy.Narayanan@edinburgh.gov.uk | Tel: 07825 833 934

Report

Our Future Streets: Edinburgh's approach to a circulation plan

2. Executive Summary

2.1 A key deliverable of the City Mobility Plan (CMP) is a commitment to develop a strategic approach to allocating street space between different travel modes by the end of 2023.

2.2 This report sets out how this will be achieved through the development of a Street-space Allocation Framework. This will include citywide network mapping and a written framework to aid future decision making. The report also provides an indicative timeline for achieving key milestones.

3. Background

3.1 Cities, including Edinburgh, acknowledge that streets are not just travel corridors but important 'ecosystems', places and destinations in their own right. They play an important role in adding to the city's green and blue networks, helping to combat climate change, enhancing biodiversity, and improving wellbeing.

3.2 Compared to other UK cities, the proportion of land given over to street space in Edinburgh is small. The pressure to accommodate all types of traffic, as well as parking, while still giving priority to certain travel modes in some places results in congestion and difficult travelling conditions, especially for people walking and cycling along many routes. This challenge contributes to public transport disruption, limits provision of connected and safe active travel networks and exacerbates pollution (air and noise).

3.3 Congestion significantly impacts on cities' economic potential; in Edinburgh it disproportionately affects those living in the most deprived neighbourhoods and those running micro-businesses and small and medium sized enterprises (SMEs) across the city. Global cities use street space rationally to their competitive economic advantage, enhancing socio-economic outcomes for all.

3.4 Edinburgh has very good public transport and some very walkable, compact urban areas including the city centre. Yet its historic network of streets is subject to intense competition for space due to high levels of vehicle ownership (roughly 60%

of householders have access to one or more cars), which is unsustainable for a growing, densifying city.

3.5   Throughout the 20th century and until recently street design has tended to prioritise motorised traffic, especially cars. The resulting traffic-dominated streets damage public health, wellbeing and safety, sever communities from key services, detract from beautiful and sensitive historic areas, and make it harder to travel around the city. As a rapidly growing and densifying city, street-space is at a renewed premium.

3.6   The Council is committed to prioritising sustainable travel that is accessible, safe and efficient as set out in the CMP.

3.7   Despite progress made to support sustainable, safe and accessible travel, significant challenges remain. Examples include overcrowding on some busy pavements, intimidating conditions for cycling on most major roads and streets, and delays to buses. These challenges serve to make travelling sustainably less attractive, which in turn has negative impacts on road safety, air quality and wellbeing.

3.8   The Council has set an ambitious target to achieving net zero emissions by 2030, as part of its agreed Climate Strategy 2030 which addresses the ongoing Climate Emergency declared by the Council in 2019. Progress has been made, yet transport is the worst performing sector across Edinburgh in terms of emissions that damage both public health (NO_2) and contribute significantly to climate change (CO_2). Nationally, the Scottish Government has set a target to reduce car mileage in Scotland by 20% by 2030. To accelerate progress locally, the Council has set an ambitious target to reduce miles driven in Edinburgh by 30% by 2030.

3.9   To reach net zero for transport, the city will need to act 12 times faster[1] than it has across the last two decades in this area, requiring coordination and partnership working between all individuals and organisations across the city.

3.10   The CMP seeks to deliver a truly sustainable transport network via its 'Strategic Approach to Road Space Allocation (Movement 25)' policy: to "*develop and deliver a strategic approach to allocating road space between modes of travel to define the degree of priority to be given to different modes on different streets".*

3.11   In developing an approach to the (re)allocation of street space, a review of the networks for movement by all modes (including freight and servicing in time) alongside the role of streets as places and for climate adaptation is needed. To meet the CMP objectives, the sustainable transport hierarchy should be the starting point for this review.

3.12   Several cities in the UK and more widely have recently adopted more strategic approaches to street-space allocation. Key examples are the circulation plans of Ghent and Birmingham, and Amsterdam's 'Plusnet'.

3.13   The circulation plans of Ghent and Birmingham are city centre focussed and place significant reliance on the presence of an inner-city ring road to deliver largely traffic-free city centres. The 'Plusnet' takes a city-wide approach in a city which, like

[1] Policy and Sustainability Committee - 2030 Climate Strategy and Implementation Plan, p.30 (2021)

Edinburgh, does not have a high-capacity inner ring road. Plusnet was introduced in 2005 and has been developing and evolving since that time. (Further information on the approaches in other cities is provided in Appendix 4.)

4. Main report

4.1 The approach proposed for Edinburgh is similar to the Plusnet in that it seeks to provide a framework for the whole city, which would then inform specific plans for local centres, corridors *and* the city centre.

4.2 Edinburgh's future streets would use a Street-space Allocation Framework, including maps, which set out networks for various means of travel, supported by a written framework for future decision making. Together these would:

4.2.1 Set a context for individual street improvement projects;

4.2.2 Reduce the need to revisit priorities for individual projects on individual streets by setting them in a strategic context;

4.2.3 Help accelerate delivery of projects and programmes;

4.2.4 Help inform a 'co-design' process with key stakeholders to inform solutions that can be tailored both to individual street circumstances and primary network priorities at the project design stage; and

4.2.5 Be clear, accessible, and understandable.

4.3 The Street-space Allocation Framework, maps and written framework would aim to:

4.3.1 Facilitate medium and long-term planning of investment in strategic active travel and public transport networks;

4.3.2 Help integrate and coordinate relevant workstreams of committed and future transport and street improvement programmes and projects;

4.3.3 Assist in streamlined infrastructure delivery, setting a strategic context and method for (re)allocating street space with an agreed and transparent process for trade-offs; and

4.3.4 Assist in identifying interventions that would help deliver the core 20-minute neighbourhood aim that every resident can access key services and amenities within a 20-minute round trip from their home without the need to use a private car.

Citywide Network Mapping

4.4 As noted in para 4.1, the approach proposed for Edinburgh is based around Amsterdam's 'Plusnet' mapping and methodology, though with a different framework for decision-making to reflect the differences between the cities and patterns of movement. (Notably, Edinburgh has more pedestrian and bus movement, less cycling and a much more limited tram network).

4.5 To produce integrated mapping with an accompanying decision framework will be a four step process:
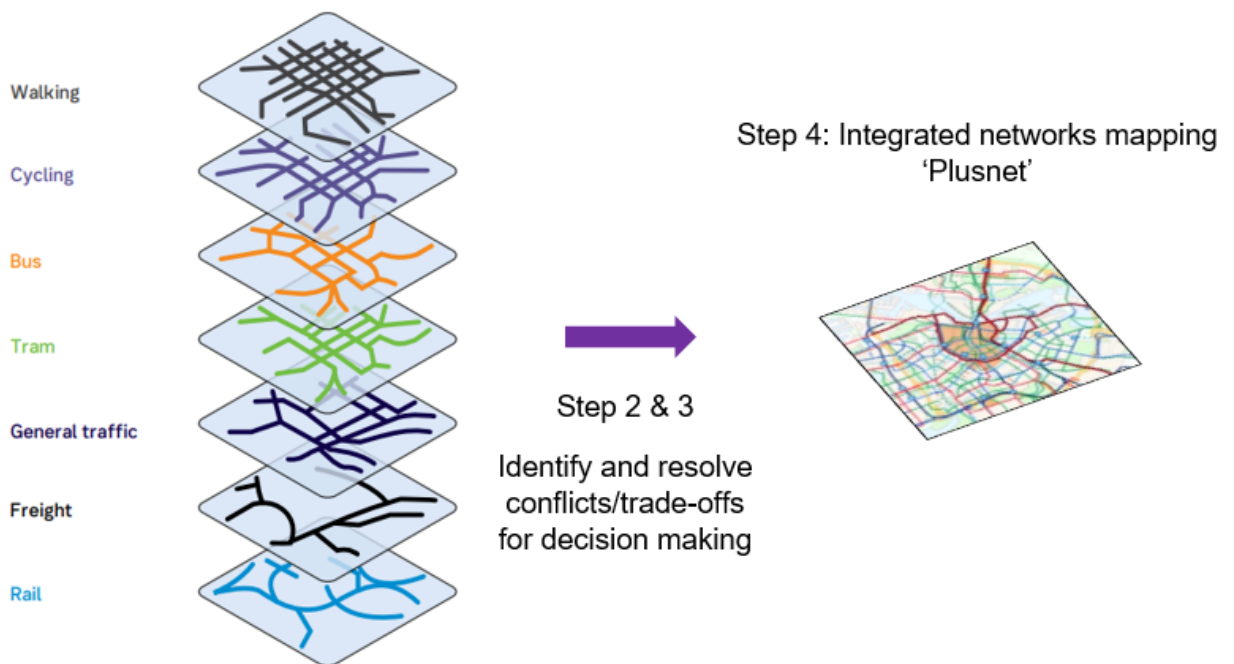
4.5.1 Step 1 - Production of maps for each mode;

4.5.2 Step 2 - Identification of conflicts between the individual mode maps;

4.5.3 Step 3 - Use of strategic decision framework to help resolve conflicts and revise the maps; and

4.5.4 Step 4 - Production of integrated mapping.

4.6 Full details on the approach to network mapping are included in Appendices 1 and 2.

4.7 It is proposed to engage with key stakeholders (e.g. bus operators) during the mapping phase, prior to wider public consultation in the new year.

4.8 The following graphic summarises steps one through to four:

Step 1 Network maps for each mode

Walking
Cycling
Bus
Tram
General traffic
Freight
Rail

Step 2 & 3
Identify and resolve conflicts/trade-offs for decision making

Step 4: Integrated networks mapping 'Plusnet'

Sources: Movement and Place in Victoria; Amsterdam's 'Plusnet': Networks Infrastructure Map

Indicative Timeline

4.9 Development of the Framework is an iterative process. Further refinement is required to take account of the range of proposed actions in the forthcoming Active Travel Action Plan 2030 (ATAP) and Public Transport Action Plan 2030 (PTAP) and their spatial requirements on street. These plans are due to be presented to Committee in December 2022. Once these plans have been considered, the Framework will be updated and the three plans will be subject to public consultation in an integrated manner.

4.10 An indicative timeline is outlined in Appendix 3.

5. Next Steps

5.1 If the recommendations of this report are approved, officers will:

5.1.1 Proceed with the development of the Framework, as presented herein and in the indicative delivery timeline;

5.1.2 Continue collaboration with key partners to provide further detail to the Framework, its decision-making processes and its emerging engagement strategies;

5.1.3 Continue detailed internal engagement with officers across the Council; and

5.1.4 Update Committee in December 2022 on a joint consultation and engagement strategy for the Framework, ATAP and PTAP, with a view to launching public and stakeholder consultation in January 2023.

6. Financial impact

6.1 Grant funding of £150,000 has been received from Sustrans to contribute to the cost of developing the Framework.

6.2 In addition, funding of up to £30,000 has been set aside in the 20-minute neighbourhood programme budget to support the development of this work.

7. Stakeholder/Community Impact

7.1 The approach to stakeholder and community involvement in developing the Framework will be set out in more detail as part of a report to Committee in December 2022 (as outlined in paragraph 5.1.4).

8. Background reading/external references

8.1 City Mobility Plan – Transport and Environment Committee, 19 February 2021

8.2 2030 City Target Monitoring Approach – Policy and Sustainability Committee, 20 April 2021

8.3 20 Minute Neighbourhood Strategy – Policy and Sustainability Committee, 10 June 2021

8.4 2030 Climate Strategy and Implementation Plan – Policy and Sustainability Committee, 30 November 2021

8.5 City Plan 2030 – Approval of Proposed Plan for Statutory Representation Period – Planning Committee, 29 September 2021

8.6 'Plusnet': Amsterdam's Plus Networks and Main Networks Infrastructure Map (City of Amsterdam, 2022)

8.7 Copenhagen Metropolitan 'Finger Plan': A Robust Urban Planning Success Based on Collaborative Governance (Sørensen and Torfing, September 2019)

8.8   Cycling by Design (Transport Scotland, September 2021)

8.9   Edinburgh Street Design Guidance

8.10   Future Edinburgh

8.11   Multimodal Optimisation of Roadspace in Europe (MORE) (University College London, 2017-22)

8.12   Movement and Place in Victoria (Victoria State Government, February 2019)

9.   Appendices

9.1   Appendix 1 – Citywide Network Mapping.

9.2   Appendix 2 – Draft Decision Framework Principles.

9.3   Appendix 3 – Draft Timeline.

9.4   Appendix 4 – Global Cities Best Practice.

Appendix 1 – Citywide network mapping

As noted in the main report, the approach proposed for Edinburgh is based around Amsterdam's 'Plusnet' mapping and methodology though with a different framework for decision-making to reflect the different cities and patterns of movement. Notably, Edinburgh has more pedestrian and bus movement, less cycling and a much more limited tram network.

1.1   The objective is to produce an integrated map with accompanying decision framework. This will be a 4-step process,

    1.1.1   Step 1 - Production of maps for each mode, as well as map(s) for other functions of street space;

    1.1.2   Step 2 - Identification of conflicts between the individual mode maps and 'place' functions;

    1.1.3   Step 3 - Use of strategic decision framework to help resolve conflicts and revise the maps; and

    1.1.4   Step 4 - Production of integrated mapping.

    It is proposed to engage with key stakeholders (e.g. bus operators) during this process, prior to wider public consultation in the new year.

Step 1 - Mapping for place functions and different means of travel

1.2   For each of the ways that people move around the city (walking and wheeling, cycling, public transport or by private vehicle) maps will be produced, building on existing information (e.g. bus routes, bus priority lanes, cycle network proposals, and shopping streets).

1.3   As well as supporting citywide movement, streets have a variety of roles as 'places', with space on the street required for the likes of trees and street furniture (e.g. bins). Whilst it is not intended to initially map all of these functions, these street uses will need to be considered (see Appendix 2). As the Street-space Allocation Framework is an iterative process, some of these functions will be added to the mapped layers in due course (for example, once work on Edinburgh's blue-green network is completed).

1.4   For individual travel networks, each of the links within it will be categorised into three levels: local, secondary, and strategic. This will be done individually for each travel network. The different levels will reflect the importance of that link within the overall network.

1.5   The level of the link in the network determines the type and standard of provision that would be expected on the street(s). For example, a strategic cycle link would mean that segregation from motor traffic should be provided (except on very low traffic streets).

1.6   Draft network maps will form part of the reporting of the ATAP and the PTAP to Transport and Environment Committee in December 2022.

Step 2 – Identifying conflicts

1.7 Once Step 1 has been completed for each travel mode, the maps will be overlaid. It will then be possible to identify overlaps on the different networks and in particular, where the most significant conflicts for space are likely to be located.

Step 3 – Resolving conflicts and revising mapping

1.8 Where strategically significant conflicts are highlighted, the decision-making process below will be used to help reach a resolution. This will ensure that the future citywide networks work as a whole- being integrated, coherent and efficient.

Step 4 – Producing an integrated map

1.9 It is proposed to use a strategic decision framework, outlined at high-level below, to help resolve conflicts and arrive at an integrated citywide map. The high-level principles of this framework are as follows:

1.9.1 All of the principles, and the trade-offs involved, will be considered in the context of the Council's target to reduce motorised traffic by 30% by 2030;

1.9.2 Focussing on place, and walking/wheeling in high streets and the city centre;

1.9.3 Prioritising place, walking/wheeling, cycling, and public transport over private car movement citywide;

1.9.4 Delivering a coherent citywide cycle network, but not at the expense of conditions for pedestrians and minimising any impacts on public transport;

1.9.5 Ensuring reasonable access for servicing, but being 'smarter' about this, for example using timed servicing windows or hubs;

1.9.6 Ensuring availability of car parking in reasonable proximity to people's homes;

1.9.7 Ensuring streets are designed to support climate adaptation, linking of blue and green networks and to protect and, where possible, enhance sensitive historic street settings;

1.9.8 Ensuring streets are designed to be inclusive and support ease of movement for people of all abilities

1.9.9 Ensuring consideration is given to impacts on and opportunities to reduce all harmful emissions and improve air quality

1.10 More detail on Steps 3 and 4 can be found in Appendix 2.

Appendix 2 - Draft Decision Framework Principles

Place, walking and wheeling

In primary locations (e.g. high streets):

- Generally prioritising and delivering a high-quality street environment for pedestrians over all motorised vehicular flow, as per the sustainable transport hierarchy; and

- Generally avoiding any loss of pedestrian space to provide segregated cycling.

In secondary locations (residential, local streets):

- Generally prioritising delivering a high-quality street environment for pedestrians over private motorised traffic flow; and

- Minimise any loss of pedestrian space to provide segregated cycling.

Cycle network

On primary network:

- Provide segregation from motorised traffic, except where the network uses low-flow, low speed streets; and

- Avoid causing any increases in bus delays and consider alternative routing options as a last resort

On secondary network:

- Provide segregation or unobstructed marked lanes, except where the network uses low-flow, low speed streets; and

- Avoid causing significant increases in bus delays and consider alternative routing where it is impossible to do so.

On local network:

- Generally use low-flow, low speed streets.

Buses

Entire network:

- Put in place measures (e.g. signal priority) to improve on current overall route bus journey times

Primary and secondary networks:

- Aim to provide/retain priority lanes wherever this will provide a positive impact on bus journey times - balancing with objectives for place, walking/wheeling and cycling - with the greatest emphasis on the primary network.

Trams

- Treat the same as the primary bus network, though with a stronger assumption in favour of segregation to ensure journey-time reliability.

<u>Loading/Servicing</u>

- Ensure that businesses and residents have adequate access to useable loading. In streets with a strategic or secondary function for walking, cycling or public transport this may mean loading from logistics hubs or timed loading windows.

<u>Parking</u>

- Ensure that residents have adequate access to useable car parking. Consider customer parking on a street-by-street basis. Streets with a strategic or secondary function for walking, cycling or public transport are likely to have restricted parking.

- Give particular consideration to parking for disabled people.

<u>Commercial traffic</u>

- Ensure ready access to businesses for servicing vans and lorries, with priority given to sustainable modes.

<u>Car/ general traffic</u>

- Ensure a clear and coherent network of routes; and

- Avoid delays that will have a significant knock-on effect to public transport or air quality.

Appendix 3 – Draft Timeline

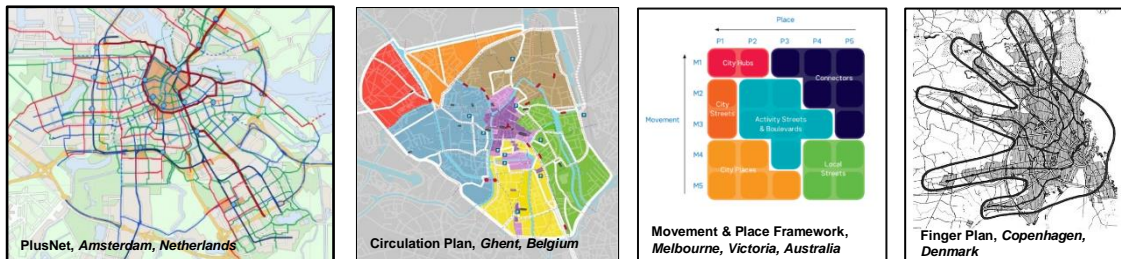| Timeline	Activity	Detail	Milestone
October – December 2022	Framework and maps development	Collaboration with key partners (University College London (UCL), consultants, Council officers, key stakeholders)	
January – March 2023	Joint consultation (ATAP, PTAP and Framework)	Stakeholder workshops with: - Officers, consultants - Scottish Government/Transport Scotland/ Local Authorities - Elected members Public consultation	Transport and Environment Committee in March 2023 updated on progress of the framework development. Consultation analysis will not be fully completed at this point.
April – June 2023	Framework and maps revision	Consultation feedback analysed; framework further developed. Stakeholder workshops: - Representative groups (active travel, disabilities, businesses, public transport providers including Lothian Buses and Edinburgh Trams etc) - Elected members, Edinburgh Association of Community Councils (EACC)	

August 2023	Revised Interim Framework	Interim Framework presented for approval and integrated with relevant Council action plans.	Report to Committee in August 2023 on the Interim Framework.
On-going	Review and revision of the Framework	Further review and revision of Framework likely on a regular basis	

Appendix 4 - Global cities' best practice

Many leading global cities, particularly those in Northern Europe, have a strong tradition of integrated urban spatial and transport planning and have used planning structures to their competitive advantage.

Examples range from strategic mapping or zoning areas for priority transport modes (Amsterdam, Ghent), or highlighting main principles and structures via frameworks (Melbourne). Cities are most successful when stakeholder buy-in is achieved from the outset, with a notable example of this being Copenhagen's successful and widely praised post-war 'Finger Plan' which started as a 'bottom-up' initiative.

Frameworks can bring together many of these structures and are crucial to providing a clear link from agreed policies and tangible changes on streets locally, while maintaining strategic, long-term citywide perspectives. Fundamentally, frameworks can facilitate meaningful engagement with key stakeholders during the design of streets, via transparent and collaborative decision-making processes such as co-design of proposals between communities and transport planning professionals.

PlusNet, *Amsterdam, Netherlands*

Circulation Plan, *Ghent, Belgium*

Movement & Place Framework, *Melbourne, Victoria, Australia*

Finger Plan, *Copenhagen, Denmark*

Previous discussions have highlighted Edinburgh's collective thinking for an approach such as a 'circulation plan'. As this has developed, it has been recognised that the required approach for Edinburgh should apply to the city centre *and* the city as a whole. The accessible name – 'Our Future Streets' – reflects more closely the proposed approach for a Street-space Allocation Framework.

UCL have recently completed a joint study on re-allocating street space on urban corridors in five European cities, including Budapest and London (Multimodal Optimisation of Roadspace in Europe (MORE)). In this study, detail is provided around a number of key recommendations for cities. For example:

- Encouraging greater rigour in the urban street planning and design processes, especially for contexts to address more complex and contested situations;

- Classifying urban networks in terms of their 'movement' and 'place' functions;

- Ensuring solutions for streets consider all users' needs;

- Building extensive stakeholder engagement into processes, including through option generation, appraisal and decision taking; and

- Consideration for time-specific and dynamic space allocation.

Edinburgh has the opportunity to blend together best practice from global cities and leading academic research, to create an innovative and collaborative framework for (re)

allocating street space. Once in place, the framework would be expected to continuously evolve and adapt and could help to accelerate delivery of both committed and future projects towards net zero 2030;

With a comprehensive method and approach for decision-making, the framework would help ensure a coherent and strategic approach but coupled with detailed engagement and co-design of individual street schemes.