

# **CARDIFF COUNCIL CYNGOR CAERDYDD**

## **CABINET MEETING: April 2023**

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### **DELIVERING A PERMANENT IMPROVEMENT IN AIR QUALITY ON CASTLE STREET IN THE CONTEXT OF CITYWIDE SUSTAINABLE TRANSPORT PROPOSALS**

#### **PLANNING, TRANSPORT & HIGHWAYS (CLLR DAN DE'ATH) AGENDA ITEM:**

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#### **Reason for this Report**

1. To report back and assess the implications of the most recent air quality and traffic modelling results for Castle Street and the wider city sustainable transport network.
2. To respond to the Welsh Government Air Quality Direction on Air Quality Compliance issued to Cardiff Council, which includes a formal decision to implement a permanent transport scheme.
3. To seek delegated authority to proceed with design, tender and delivery of Option 1 (All Traffic, Bus Lane and Cycle Lane) as the preferred permanent scheme.

#### **Background**

4. Castle Street is one of the most significant and focal streets in Cardiff City Centre, it is also an integral part of the wider transport and highway network. Due to its central position, Castle Street has suffered high levels of traffic usage resulting in a degraded environment and noncompliant air quality levels.
5. As a result, in 2018 the Council received a legal direction from the Welsh Government to ensure that air pollution levels were below the EU limit value, specifically levels of nitrogen dioxide (NO<sub>2</sub>). In response, the Council undertook a detailed analysis of air pollution levels across the city, which identified Castle Street as the sole non-compliant street.
6. In June 2019, the Cabinet approved a Clean Air Plan which set out the steps required to improve air quality in the city centre, and on Castle Street specifically. This included three major city centre schemes:

- **City Centre West:** Central Square and Westgate Street
  - **City Centre North:** Boulevard de Nantes, Kingsway and Castle Street
  - **City Centre East:** Dumfries Place, Station Terrace, Churchill Way / including the Canal reopening, and Bute Terrace
6. In addition, the following supporting projects were included within the Clean Air Plan:
- **City Centre Enabling Works Package:** A series of supporting network enhancement that will improve connections to and from the city centre area
  - **SMART Corridors:** Three improvement corridors (North, East and West) aimed at monitoring clean air and traffic levels, improving bus journey time reliability into the city centre and alleviating congestion problems on key routes.
7. Following the approval of the Clean Air Plan, £15.2m was secured from Welsh Government to progress these schemes, representing a significant contribution towards the total project cost.
8. Successful implementation would significantly improve air quality and ensure compliance with legal limits. It would also install high quality active travel infrastructure for the city, ensure policy compliant drainage, and improve connectivity between key developments by strategically aligning bus routes and enhancing links with the new Transport Interchange. An overview of city centre project areas is included in Appendix 1 of this report.

#### Covid-19 Pandemic – Temporary Transport Interventions:

9. During the COVID19 Pandemic a series of transport measures were implemented in the city centre. The aim of these measures was to ensure safe public access to the city centre and support the recovery of the business and public transport sectors. The measures for Castle Street included:
- Summer 2020: Castle Street was closed to all traffic to accommodate an outdoor dining area, with Station Terrace restricted to bus, taxi and limited access only.
  - Autumn 2020: The pavement was extended on Castle Street south, outdoor dining areas were removed and buses, taxis & access vehicles were allowed in. Station Terrace was opened to all traffic.
  - Autumn 2020 – Present: A series of Pop up Cycleway were installed in the city centre to replicate those included in the permanent programme, extensions to these cycleways continue to be on site today and have seen over 2.5 miles of additional cycleways installed.
  - April 2021: Station Terrace closure to support buses, the future City Centre East Transport Project and the delivery of the Churchill Way event space.

- October 2021: Castle Street reopened to general traffic with an interim scheme which replicated the proposed Option 1 Clean Air Scheme.

### Post COVID Position & Recent Developments

10. Following the COVID19 pandemic period, several measures were taken forward to respond and to support the city centre during the recovery process:
11. **Castle Street Reopening:** Following the Cabinet Decision to reopen Castle Street to general traffic in June 2021, the Transport Department proceeded to amend the arrangement of the street to accommodate a temporary version of the 'All Traffic' Option 1 Permanent Transport Scheme. This scheme was implemented in October 2021 and included the following lane arrangement:
  - Lane 1: Westbound Bus Lane
  - Lane 2: Westbound All Traffic Lane
  - Lane 3: East bound All Traffic Lane
  - Lane 4: Two-Way Temporary Segregated Cycleway
12. **The Current Temporary Scheme:** It is important to recognise that the current scheme on street remains a temporary scheme and is non-compliant with wider Cardiff and Welsh Government policy. The Cycleway design, highway arrangement and drainage do not adhere to national guidance. In this regard, the current scheme is likely to require renewal in the short term.
13. **Ongoing Air Quality and Traffic Monitoring:** Air quality monitors installed by the SMART Corridor West scheme, regular traffic surveys and on-site observations have been used since 2021 to define a settled post-COVID network picture.
14. **Re-testing Options:** The data from recent monitoring activity has been used to re-calibrate the South East Wales Model (SEWTM) and re-test both the Option 1 'All Traffic' Scheme and the Option 2 'Bus Gated' Scheme.
15. **Air Quality Compliance:** The current scheme in place on street is a temporary version of the Option 1 All Traffic Scheme. Monitoring undertaken on Castle Street has shown that NO<sub>2</sub> compliance has been achieved with the annual average for 2022 being recorded at 33.8 µg/m<sup>3</sup>, well within the EU Limit value (compliance target) of 40 µg/m<sup>3</sup> as an annual average.
16. **Welsh Government Direction:** The Council is still being directed by Welsh Government to decide (by March 2023) to either implement the permanent version of the Option 1 'All Traffic' scheme previously approved. Or, if the Council is minded to implement an alternative scheme to improve air quality further, that the Council should undertake an assessment of the options, and that a final plan for the option be approved

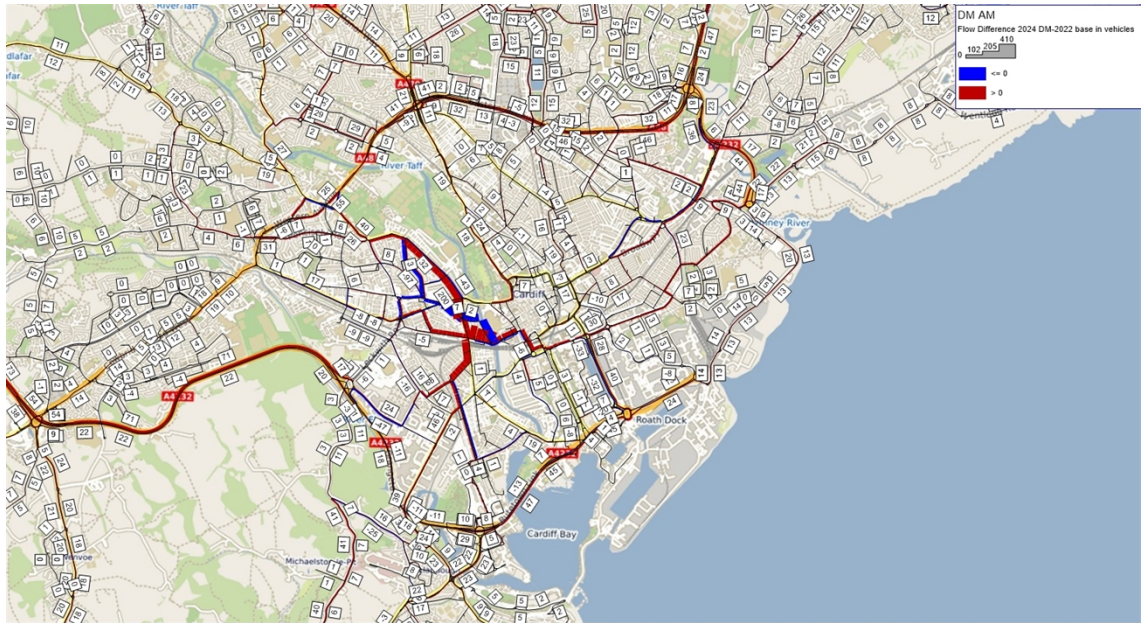
by the end of March 2023 and then submitted to Welsh Government for approval.

## Castle Street Modelling Results

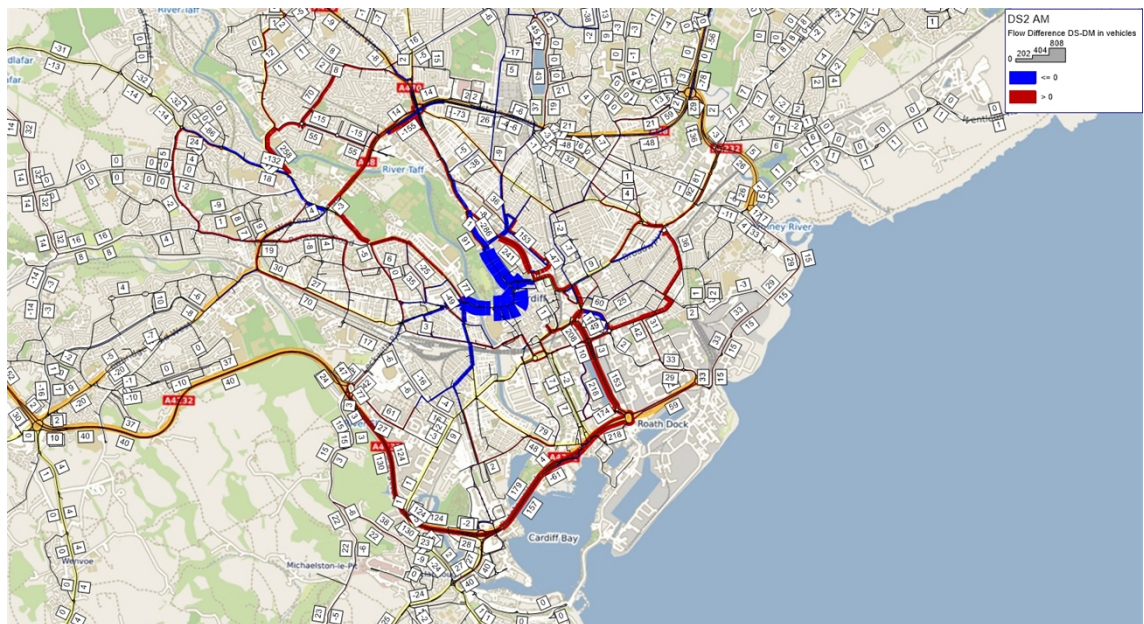
17. As noted above, a number of temporary adaptations were made to Castle Street in responding to the COVID19 Pandemic, and subsequent traffic surveys and air quality monitoring results have been used to re-assess the options. The two options that have been considered are:
  - **Option 1 ‘All Traffic’:** This scheme is the previously approved design included in the Council’s Clean Air Plan. The scheme allows general traffic to access the area under reduced capacity, whilst also providing segregated cycling facilities, bus priority and public realm improvements. The design for this option is included in Appendix 3 of this report.
  - **Option 2 ‘Bus Gate’:** A variation on Option 1 where general traffic is restricted from using the street as a through-route. The scheme provides a segregated cycle lane, bus and taxi access through bus gating, and improved public realm via an extension to the pavement on the south side. The design for this option is included in Appendix 3 of this report.
18. Detailed transportation modelling has been undertaken on both a detailed City Centre VISSIM Model and a wider Strategic Transport Model (SEWTM), with highway flows recalibrated with traffic data collected in central Cardiff during 2022. The highway network was updated to reflect recent schemes or restrictions that have been implemented in the city, since the original modelling work was first undertaken in 2018.
19. The modelling has projected transportation impacts, including demand growth forecasts for a forecast year of 2024, when either Option 1 or Option 2 would be substantially completed and implemented.
20. The traffic model provided vehicle flows for four highway user classes which are: Car, LGV, HGV and Buses. HGVs were further broken down into rigid and articulated and cars were divided into private hire and Hackney taxis subcategories, this was undertaken using Automatic Number Plate Recognition (ANPR) data
21. The results of the transportation model have been extracted to allow detailed air quality dispersion modelling to be undertaken to forecast likely NO<sub>2</sub> concentrations for the forecasted year of 2024.
22. The impacts of the schemes are detailed in

Figure 1 and Figure 2 below, where road networks which are coded in blue show a decrease in traffic flows, and those in red show an increase in traffic flows for 2024. Full Transportation Modelling outputs are included in Appendix 2 and 3.

**Figure 1 - Transportation Model Flows for Option 1-2024**



**Figure 2 - Transportation Model Flows Option 2-2024**



### **Air Quality Modelling**

23. The transportation modelling undertaken, has allowed vehicle emission calculations for each vehicle category based on vehicle fuel type and Euro classification to be made as part of the modelling work. Information on the local fuel type mix and Euro standard distribution has been collected from the ANPR surveys conducted in 2022. The ANPR data were used to calculate the proportions of vehicle types, fuel splits, and Euro classification for the 2022 fleet used in the modelling. The fleet was

projected forward to 2024 using NAEI projections for the future year modelling.

24. The 2022 baseline model does not indicate exceedances of the NO<sub>2</sub> annual average 40 µg/m<sup>3</sup> threshold limit on any PCM links. The maximum concentration on the link representing Castle Street predicted a concentration of 38.1 µg/m<sup>3</sup>. As the model is known to over-predict concentrations in this location (see Appendix 1), exceedances on Castle Street are not likely, and this was reflected in the actual measured data for 2022 recording a concentration of 33.8 µg/m<sup>3</sup>.
25. The 2024 modelled data for Option 1 predicts that annual average NO<sub>2</sub> concentrations are likely to reduce on most road links, and there are no exceedances of the NO<sub>2</sub> annual average 40 µg/m<sup>3</sup> threshold limit. On Castle Street the maximum NO<sub>2</sub> concentration reduces to 33.9 µg/m<sup>3</sup> which is well within the compliance value.
26. The 2024 modelled data for Option 2 also predicts that annual averaged NO<sub>2</sub> concentrations are likely to fall compared to both the 2022 baseline and 2024 Option 1 on Castle Street, where the peak concentration is forecasted to be 26.4µg/m<sup>3</sup>. There are no exceedances of the NO<sub>2</sub> annual average 40 µg/m<sup>3</sup> threshold limit on any other road links within the City.
27. Differences in NO<sub>2</sub> concentrations between the 2024 Option 1 and Option 2 are lower at most locations than between the 2022 baseline. In some locations, the maximum concentrations of the 2024 Option 2 are slightly higher than the maximum Option 1; this is expected to be caused by traffic from vehicles other than buses and taxis that are diverted from Castle Street to surrounding roads. However, the diverted traffic is not predicted to cause exceedances of the NO<sub>2</sub> annual average 40 µg/m<sup>3</sup> limit, even when model uncertainty is considered.
28. The projected modelled results for 2024 for both schemes are summarised in Table 1 below, and the modelled road links detailed in Figure 3 and Figure 4 , The full air quality modelling report is presented in Appendix 4.

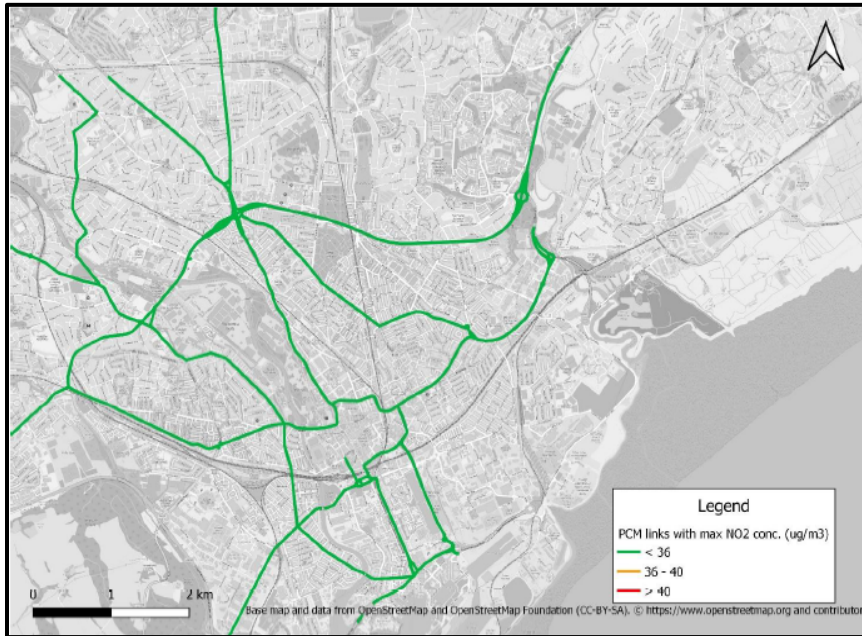
**Table 1 - Modelled NO<sub>2</sub> Concentrations µg/m<sup>3</sup> of Option 1 and 2**

Road	Option 1 2022	Option 1 2024	Option 2 2024	Difference Option 2/Option 1
A48	30.4	24.9	24.8	-0.1
A4119	35.8	22.6	22.8	0.2
A4160	37.2	28.4	29.6	1.2
A48	29.4	25.9	27.1	1.2
A4054	21	18.6	19.4	0.8

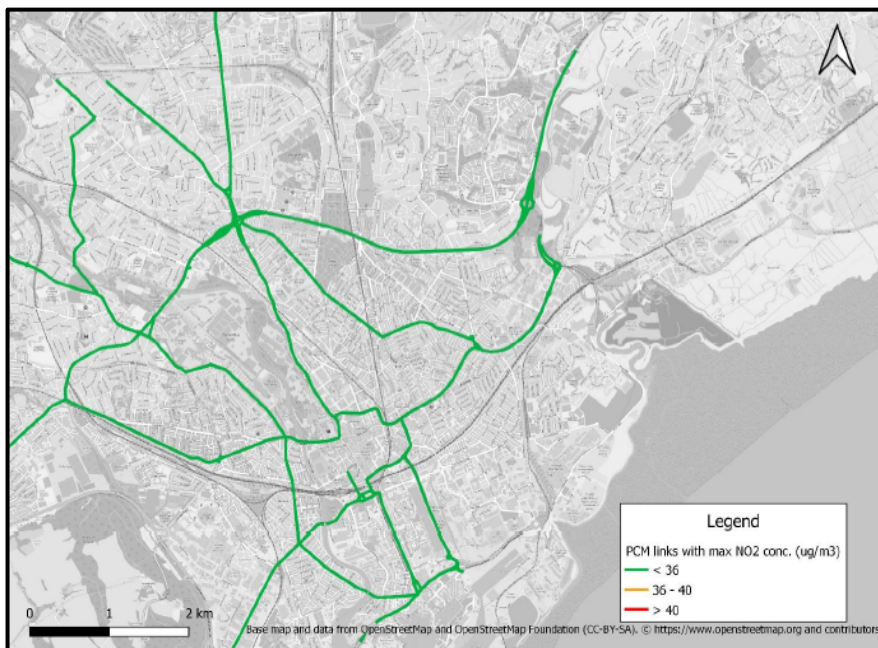
A4119	27.1	23.9	25.0	1.1
A4160	29	25.2	25.0	-0.2
A4161	34.7	29.1	29.3	0.2
A4161	20.7	18.0	17.5	-0.5
A48	39.2	33.4	33.3	-0.1
A470	26.2	23.5	20.2	-3.3
A4119	21.4	19.0	19.4	0.4
A4119	38	31.1	32.2	1.1
<b>A4161 (Castle Street)</b>	<b>38.1</b>	<b>33.9</b>	<b>26.4</b>	<b>-7.5</b>
A470	29.5	25.7	26.3	0.6
A469	32.9	28.9	28.8	-0.1
A4160	20.6	18.9	18.9	0
A4161	30.9	27.2	27.4	0.2
A48	34.8	31.0	32.8	1.8
A470	37.2	32.4	32.4	0
A469	28.8	26.1	25.7	-0.4
A4119	28.8	27.2	26.7	-0.5
A4119	28.6	24.9	28.0	3.1
A4161	21.8	19.4	19.4	0
A4161	28.2	25.3	19.8	-5.5
A4161	39	34.0	34.1	0.1
A4232	27.2	22.1	22.4	0.3
A470	26.4	23.4	24.3	0.9
A470	30.3	30.4	31.2	0.8
A470	28.8	23.8	24.1	0.3
A4232	32.7	27.4	27.8	0.4
A469	25.4	23.0	22.9	-0.1
A4160	35.4	32.3	33.5	1.2
A4234	29.8	26.4	27.5	1.1
A4055	27.4	23.3	23.3	0

A48	32.9	27.5	27.3	-0.2
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**Figure 3 - Modelled NO<sub>2</sub> Concentrations Option 1- 2024**



**Figure 4 - Modelled NO<sub>2</sub> Concentrations Option 2-2024**



**Air Quality Modelling Conclusion**



29. There are three key conclusions from the modelling results:
30. **Key Conclusion 1:** Both Option 1 and Option 2 achieve air quality compliance on Castle Street.
31. **Key Conclusion 2:** Whilst neither option cause dangerous levels of NO<sub>2</sub> on the surrounding network, the increased traffic displacement caused by Option 2 causes a net gain of NO<sub>2</sub> Concentrations µg/m<sup>3</sup> on the wider network. With notable increases reported on both the A4119 and the A48.
32. **Key Conclusion 3:** The chosen option must provide network resilience and support the enabling of future transport network and city development projects.

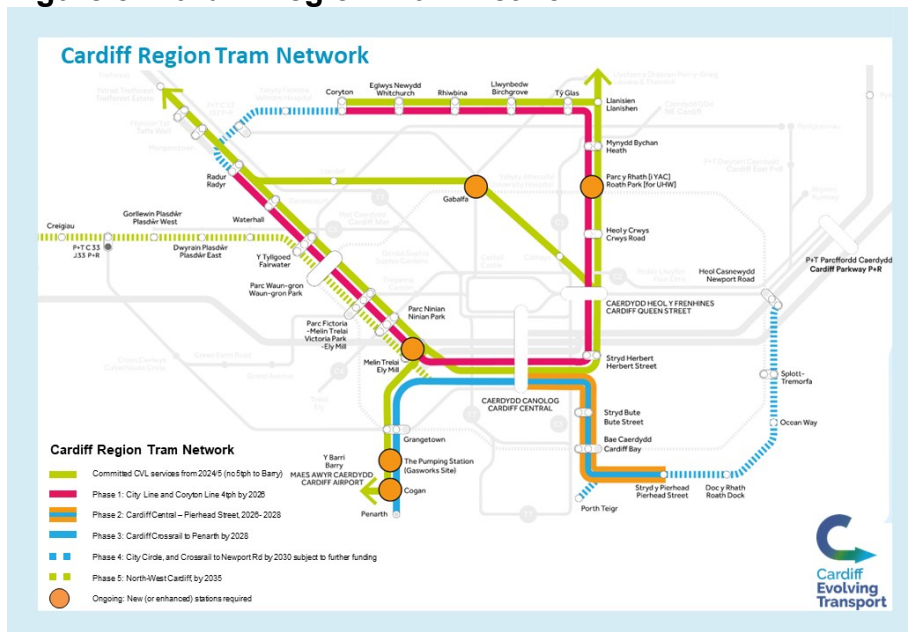
### **Strategic Network Challenges and Risks**

33. Having reviewed air quality and network issues, the overall assessment must also be viewed in the light of current network pressures, the emerging strategic citywide network and future sustainable transport network developments.
34. The A4119 and A48 run through high residential areas, schools and major healthcare locations. There is a risk that any further increases in traffic on these roads could cause further air quality issues.
35. Cardiff's unique geography means that it has limited ability to provide east-west connections across a north-south river that cuts through the middle of the city. It is important that the highway network has an element of resilience and has the ability to cope should an incident happen, such as a broken-down vehicle blocking a traffic lane or a road traffic accident completely blocking a route. The network is extremely sensitive to change, with key arterial routes (A48, A470, A4232 and M4) often experiencing incidents that cause extensive delays on the Cardiff network.
36. The A48 is facing increased pressure as the main distributor road around the north of the city centre area. A bus corridor is also planned for this route, and further pressures could tip the route in to air quality noncompliance. This route is currently at capacity during peak times, especially around the Gabalfa area. There is a clear need to protect the main approaches into the University Hospital of Wales from further congestion and delay.
37. The A4119 is the main route in and out of the Northwest Cardiff, with many more homes planned and a planned Strategic Bus Corridor planned. Further pressures in the future are likely on this route.

### **Major New Sustainable Transport Schemes**

38. In addition to the existing lack of resilience in the highway network, this will need to be carefully managed in the light of wider changes associated with introducing significant sustainable transport measures.
39. **Metro: Crossrail:** The first major step relates to the development of the Crossrail line, and in particular the implications of the recently successful levelling up fund (LUF) bid to deliver the Bay Line Phase of the Cross City Metro Scheme. This scheme will constrain the traffic network on the south side of the city centre. The available road space on Callaghan Square will need to be reduced to accommodate the tram line. Early modelling indications for a tramline in Callaghan Square are showing traffic capacity reductions in the region of 50-70%. This significant reduction in capacity, along with the inevitable construction impact suggests that Castle Street will be required as a traffic route in the medium term. Early modelling results for a tramline option through Callaghan Square are included in Appendix 2 of this report.
40. Furthermore, the Cardiff Bay Arena will be a 15,000-capacity venue attracting people from all over the UK and could form the catalyst for further development in the Bay area. The A4232 and Butetown Tunnel route also requires consideration in this context, this route is currently facing high traffic flows and will face increased pressures because of these developments.

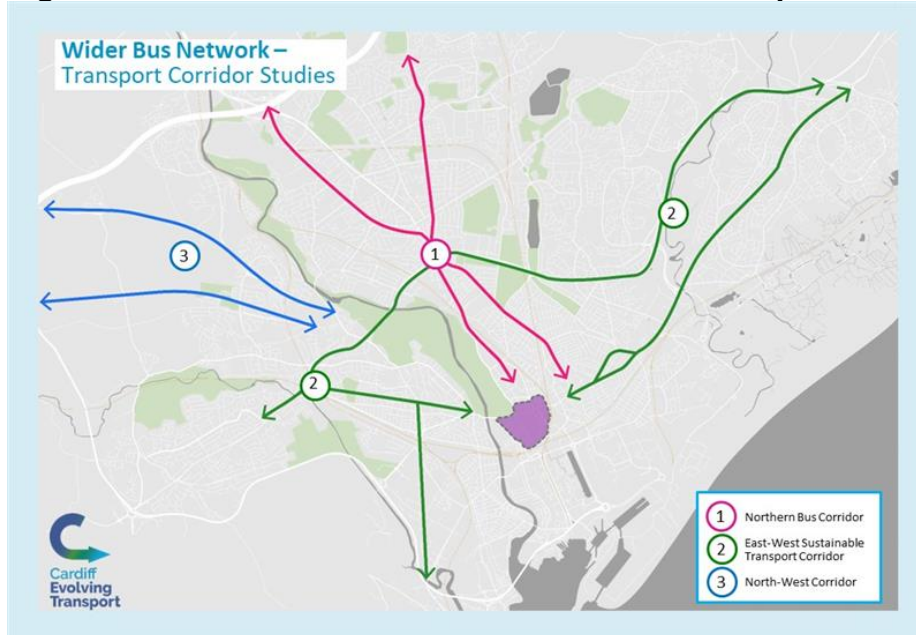
**Figure 5: Cardiff Region Tram Network**



41. **Strategic Bus Enhancements:** The Bus network and operators have been under particular pressure as a result of the covid period and subsequent funding challenges. Ensuring the sustainability of the bus network and its future development is a key priority for the Council. In view of this, the city has started to work with key stakeholders to understand a longer-term approach to the network that complements the other

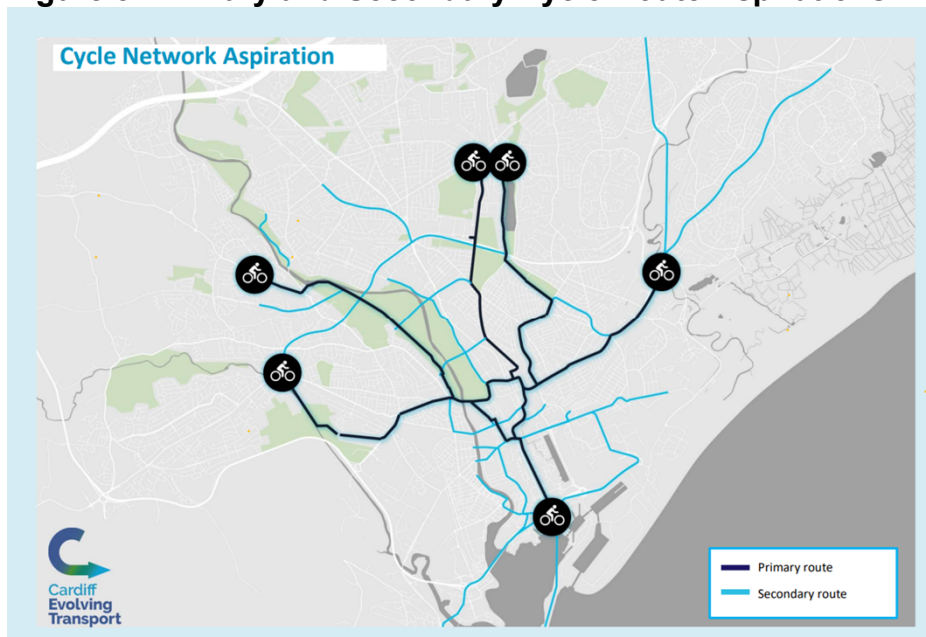
sustainable enhancements in Metro and active travel. In this regard Figure 7 shows the range of bus route reviews currently underway.

**Figure 7: Current Bus Corridors in WellTAG Development Stages**



42. The main objective of bus priority is to enable the bus to operate in a quick, reliable and safe way with minimum delay. Any aspect of the bus journey should be considered for improvement, with passengers at the heart of bus services. “Priority” needs to consider the passengers end-to-end trip, not just the time on the bus. User focused priority seeks to provide a safe, inclusive, reliable and efficient bus service. – This means bus journey reliability is of paramount of importance and when considering such measures along a key route, such as Castle St, the impact of displaced traffic, and therefore any resultant congestion on adjacent routes needs to be taken into account. Option 1 with all modes using the route provides a more sustainable journey time for buses travelling towards the city centre, particularly from the west, as there is less impact on adjacent routes as a result of re-routed general traffic.
  
43. **Strategic Cycle Enhancements:** In addition to the Crossrail and bus enhancements, aligned with the transport white paper, the Council is also moving forward with the roll out of a strategic cycle network for the city (see figure 8). This network as yet partially completed will provide a viable and secure network for cyclists across many core areas of the city and is targeted to be implemented in the next 5 years. Nonetheless, this roll out has been challenged both in terms of funding support but also regarding the positional limitation of network space to accommodate all transport modes in limited highway width.

**Figure 8: Primary and Secondary Cycle Route Aspirations**



44. In summary regarding the strategic transport enhancement programme three key comments can be made. Firstly, that significant progress has been made with regard to effectively planning and delivering new sustainable transport infrastructure, particularly referring to emerging metro and cycle networks. Secondly, funding remains the fundamental issue regarding delivering a comprehensive integrated transport network as opposed to individual enhancements. Thirdly, the highway network, already lacking resilience, requires any further interventions and reductions in capacity to ensure that all the new transport measures are introduced in a manner that allows the overall network to be resilient.
45. In this regard, the decision regarding the removal of further general traffic from Castle St – the most focal area of network on the whole city system – is critical. Importantly, this criticality relates not only to general traffic resilience but also to the wider roll out of sustainable transport measures.
46. In this respect, eliminating a key east-west route (Castle St-Duke Street) will impact on the flexibility and resilience of the transport network. A capital city should have some level of network resilience, there is a risk that closing Castle Street to traffic could increase the impact of incidents on the network and cause gridlock conditions. The impact of these incidents will be not just be felt by residents, visitors, businesses, public transport operators and emergency services but also in terms of the viability of wider sustainable measures such as bus, cycle and tram.

### **The Case for Protecting and Facilitating Network Development**

47. In this context, Options 1 and 2 have substantially distinct outcomes in terms of affording network sustainability and change. It is now more important than ever to provide network resilience and further sustainable transport options for people to consider. Continuing with the ambitious active travel and sustainable transport aspirations outlined in the Council's

White Paper on Transport (2019) will ensure that the right balance is struck between providing options for mode shift, and the network resilience required to facilitate these changes in the short-medium term.

48. The significant level of future development and the network restrictions imposed by Option 2 strongly suggest that the flexibility and resilience afforded by Option 1 will be a key facilitator in enabling the Council's White Paper aspirations. The risk of further air quality issues on the wider network also points towards Option 1 as the favourable option in the short-medium term, especially given that traffic levels are now approaching pre-COVID levels.

### **Proposed Recommendation and Next Steps**

49. In view of the above analysis, it is recommended that Option 1 (All Traffic) is moved forward as the recommended option for the following reasons:
50. **Ensures Air Quality Compliance:** The current interim scheme fully replicates the traffic conditions of Option 1, these conditions (and those modelled for the permanent option) show Castle Street well within air quality compliance levels.
51. **Provides Network Resilience:** A capital city must have a certain level of Network Resilience, it is critical that the impact of incidents, construction on the highway and future developments can be absorbed within the network.
52. **Protecting Residential Areas:** Option 1 offers the most protection from increased traffic levels in residential areas in the wider city area, the distributional impacts from Option 2, appear to increase NO<sub>2</sub> concentrations away from Castle Street in high density residential areas.
53. **Supports wider Sustainable Transport:** Further enhancements will be made to the City Centre Bus Box along with sustainable transport corridors leading in, and out of the city centre area. An all-traffic Castle St Option will still include bus priority and will connect into the wider vision for both the city centre and the wider city area. It will also support the implementation of the city mass transit/tram system, by freeing up capacity in the Callaghan Sq area. This change, along with other key interventions on the network will require a certain level of network resilience to be maintained in the medium-long term.
54. **A Permanent Scheme is Needed:** It is imperative that a permanent scheme is applied to the area of Castle Street in the next twelve months. The temporary infrastructure in place has not been designed to last any longer than the short term.

Next Steps Castle Street:

55. **The Essential need for Welsh Government Funding Commitment:** In terms of next steps it is essential that funding for a permanent scheme is confirmed by the Welsh Government, this will allow Cardiff Council to proceed with upgrading the current temporary layout into a fully permanent scheme. In this regard, the decision to proceed with Option 1 'All Traffic' is based on previous confirmed commitments given by Welsh Government to meet the full cost of the permanent scheme, and as per the approval of the Council's Clean Air Plan. Indeed, it is important to note at every stage of this process, Welsh Government's positive support and commitment to funding a permanent scheme. The decision to proceed with the Option 1 'All Traffic' scheme has been based on this commitment.
56. Furthermore, it is important to stress that the current implemented road layout was only designed for an 18-month temporary period. There are features of the scheme, in terms of cycleway and bus stop design and SUDs integration, that whilst were acceptable as temporary measures at the time of implementation are now currently in urgent need of renewal. The infrastructure in place also needs amending to meet design guidance, required safety levels and the expectations of key stakeholders.
57. In this regard, if funding for the permanent scheme was not forthcoming there would be a major risk that the current arrangement may have to be removed, and a return to the pre-temporary scheme layout is reverted to. Should the scheme be removed there remains a high risk that increased levels of traffic on Castle Street will cause non-compliant air quality levels. Overall, a confirmation of funding for a permanent scheme (circa £8-9m) is required from Welsh Government to move the scheme forward. The decision to proceed with Option 1 'All Traffic' is the bases upon the assumption that the Welsh Government will meet the cost of the permanent scheme.
58. Further steps will include:
- a. **Detailed Design & Tender:** A funding confirmation will allow the chosen scheme to be tendered once more.
  - b. **Construction:** A successful tender period will see the scheme on site early 2024.
59. The Wider Transport Network:
- a. **Ongoing Monitoring:** Air Quality monitoring stations, traffic monitoring stations and bespoke traffic surveys should be used to continually assess the state of the network and to inform future developments.
  - b. **Continued Development of the City Centre Network:** Continuing with schemes such as the City Centre Bus Box, City Centre Cycling Loop and Key Developments such as the Metro Bay Line and the Canal Quarter. Plans are included in Appendix 4 of this report.

- c. **Continued Development of the Wider Transport Network:**  
Further sustainable transport interventions are required to support the transport network and achieve the goals set out in the Council's White Paper on Transport. These include but are not limited to: The Metro Cross Rail, The Metro City Circle, a Bus Priority Network, a Fully Segregated Cycle Network and Controlled Parking Zones. Plans are included in Appendix 4 of this report.

### **Future Public and Stakeholder Engagement**

- 60. The Permanent Castle Street has previously been publicly consulted on three times:
  - a. April-May 2019: City Centre Clean Air Plans
  - b. Dec 2019-Jan 2020: Castle Street Option 1
  - c. March-May 2021: Castle Street Option 1 and Option 2
- 61. The chosen option advised in this Cabinet Report will be further consulted on via the Cabinet Approval process and the statutory Traffic Regulation Order Process.

### **Project Funding**

- 62. The Welsh Government's Clean Air funding will be used to cover the cost of construction.
- 63. It is estimated that the fees associated with delivering the project (from April 2023 onwards) will be £250,000.

### **Future Maintenance Costs**

- 64. The construction contract for the project will provide 2 years maintenance cover on hard infrastructure and 5 years cover on soft landscaping maintenance.
- 65. Following on from the construction period and the above maintenance periods, it is acknowledged that new infrastructure will cause future maintenance costs. The Project Team are working with all the relevant departments to identify costs and formulate plans for future maintenance and cleansing. This is to ensure that the level of investment proposed across the City Centre can be sustained and maintained. This will need to be a consideration in developing the future Medium Term Financial Plan, along with other Council priorities.

### **Local Member consultation (where appropriate)**

- 66. Local Members have been able to comment on the proposals for the city centre as part of the Clean Air Consultation that ran from April-May 2019.

Then again during the scheme consultations for Castle Street in December 2019-January 2020, and again in March–May 2021

67. Local Members will also be consulted with as part of the Traffic Regulation (TRO) process associated with the delivery of the final scheme.

### **Reason for Recommendations**

68. To comply with the Welsh Government direction placed on the Council to ensure continued air quality compliance is achieved on Castle Street.
69. To ensure that the temporary scheme currently in place is upgraded to a level that satisfies design guidance, road safety and future maintenance.
70. The delivery of these highway works are critical to achieving continued air quality compliance on Castle Street.
71. This transport project will deliver key commitments in the Transport White Paper and will greatly assist with meeting targets in that paper, and also the One Planet Strategy.
72. To maintain network resilience and support the future development of the transport network.

### **Financial Implications**

73. The report seeks delegated authority to proceed with design, tender and delivery of the Option 1 (All Traffic, Bus Lane and Cycle Lane) permanent scheme and identifies that funding will be made available from the Welsh Government towards the capital construction costs of the proposed upgrade to the temporary scheme.
74. The extent and source of the grant funding available has still to be confirmed and the Council will need to continue to work collaboratively with Welsh Government officers to maximise any financial contribution.
75. Until funding is confirmed, the risk remains that the scheme proposed may not be deliverable and may need to be reduced or removed to match the available funding.
76. It should also be noted that the provision of capital support to schemes is conditional upon local authorities' commitment to meet future revenue and maintenance costs.
77. As part of the development of the scheme options, the incremental revenue costs of maintaining any infrastructure to required maintenance standards and to preserve its useful life would need to be identified. Where such identified costs cannot be managed at the expense of existing maintenance obligations and minimum condition standards set for existing assets, this would need to be considered along with other pressures as



part of future medium term budget planning, consistent with an approved asset management plan.

### **Legal Implications**

78. Legal Implications are included in Appendix 5 'Exempt Legal Implications'.

### **HR Implications**

79. There are no HR Implications for this report.

### **Property Implications**

80. There are no specific property implications in respect of this Castle Street report. Where there are any resultant land transactions, negotiations or valuations required to deliver any proposals, they should be done so in accordance with the Council's Asset Management process and in consultation with Strategic Estates and relevant service areas.

## **RECOMMENDATIONS**

Cabinet is recommended to:

1. Note the modelling work carried out on the future of Castle St provides confirmation that the legal limit for Air Quality is achieved.
2. Subject to confirmation of Welsh Government Funding approve Option 1 (Do Minimum – All Traffic) to be delivered as a permanent scheme.
3. Delegate authority to the Director of Planning, Transport & Environment in consultation with the Corporate Director of Resources to deal with all aspects of the procurement process (including approving the evaluation criteria to be used and authorising the award of the proposed contract).
4. If Welsh Government funding is not forthcoming, delegate authority to the Director of Planning, Transport & Environment to review future arrangements on Castle Street and report back to Cabinet.
5. Note and support the aspirations to improve the wider transport network in line with the decision to leave Castle Street open to traffic.

<b>SENIOR RESPONSIBLE OFFICER</b>	Andrew Gregory Director of Planning, Transport & Environment
	13 <sup>th</sup> April 2023

***The following appendices are attached:***

Appendix 1 Project Area Map

Appendix 2 City Centre West and South Option Modelling (VISSIM)

Appendix 3 Castle Street Option Design

Appendix 4 Traffic Modelling and Air Quality Technical Information (SEWTM)

Appendix 5 Exempt Legal Implications