

---

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

---

**This Report contains an appendix is not for publication as it contains exempt information of the description in paragraph 16 of Schedule 12A of the Local Government Act 1972**

**Purpose of the Report**

1. The Cabinet Report, attached at **Appendix A** (*and its subsequent Appendices*), are due to be considered by the Cabinet meeting on 27 April 2023. The purpose of this Cover Report is to provide Members with background information, and to act as a signposting tool to enable their pre-decision scrutiny of the report to Cabinet.

**Structure of the Papers**

2. Attached to this report are:
  - **Appendix A** - Cabinet Report
    - **Appendix A1** - Project Area Map
    - **Appendix A2** - City Centre West and South Option Modelling
    - **Appendix A3** - Castle Street Option Design
    - **Appendix A4** - Traffic Modelling and Air Quality Technical Information (SEWTM)
    - **Appendix A5 – Exempt Legal Implication**
3. The report at appendix A2 considers the two proposed options using VISSIM, a multimodal **traffic simulation** software which allows the local impact of a proposed scheme to be assessed, providing detailed visualisation and statistical outputs for individual modes of transport, with a focus on the impact to bus travel times.

4. The report at Appendix A4 is in two parts a Clean Air feasibility Study using modelling software PTV Visum and the South East Wales Transport Model as a basis. It forecasts a 'Do- Minimum' scheme including schemes already delivered and a 'Do-Something' scheme outcomes, in which Castle Street Proposal have been included for both Option 1 'All Traffic' and Option 2 'Bus Gated' proposals, and an updated Air Quality assessment report by Ricardo.
5. The report contains the following sections:
  - Section 1 outlines the process undertaken to develop the base year (2022) cordon model;
  - Section 2 details the forecasting process used to develop the 2024 forecasts;
  - Section 3 provides a brief overview of the modelling results; and
  - Section 4 provides details of the economic assessment using Transport User Benefit Analysis (TUBA)

### **Scope of Scrutiny**

6. During this scrutiny, Members have the opportunity to explore:
  - The possible transport option for Castle Street and its impact on:
    - Air quality.
    - Transport and planning policy.
    - Sustainability.
    - Climate Emergency.
  - Whether there are any risks to the Council, financial or otherwise;
  - The timeline and next steps for delivering these proposals; and
  - The recommendations to Cabinet.

### **Background**

7. In 2018, the Welsh Government issued a legal Direction requiring the Council to comply with the EU limit value for nitrogen dioxide (NO<sub>2</sub>) found in air. The Council developed a Clean Air Plan to achieve NO<sub>2</sub> compliance and Cabinet approved this in June 2019, which can be found here: [Cabinet 13 June 2019 Clean Air Appendix 1 Clean Air FBC.pdf \(moderngov.co.uk\)](#)

8. The Clean Air Plan contains a scheme for Castle Street, which allows all traffic with restricted capacity and achieves air quality compliance re NO<sub>2</sub>. The Clean Air Plan also contains the City Centre East scheme, aiming to achieve high quality, active travel infrastructure and connect key developments in a sustainable way. The scheme covers Dumfries Place, Station Terrace, Churchill Way, including the Canal reopening, and Bute Terrace.
9. The Covid-19 national lockdown led to the pausing of the above schemes. In Summer 2020 Castle Street was closed to all traffic to accommodate an outdoor dining area and Station Terrace was restricted to bus, taxi and limited access only. In autumn 2020 the outdoor dining area in Castle Street was removed, the south pavement extended to facilitate social distancing and Castle Street reopened to buses, taxis and access vehicles. Station Terrace reopened to all traffic. In addition, a series of Pop-Up cycleways were installed in the city centre.

### **Issues Identified in the Cabinet Report**

10. **Point 9** clarifies the temporary traffic interventions that were put in place during the Covid 19 pandemic.
11. **Points 10 – 16** identify the post Covid position and recent developments, which include:
  - Castle Street reopening
  - the current temporary scheme
  - ongoing air quality and traffic monitoring
  - re-testing options
  - air quality compliance
  - Welsh Government direction.
12. The Castle Street modelling results are noted in **points 17 – 22** and includes details about the two options that have been considered and figures that model the traffic flows for each of the proposed models:
  - Figure 1 - Transportation Model Flows for Option 1 - 2024
  - Figure 2 - Transportation Model Flows Option 2 - 2024

13. Air Quality Modelling information is provided in **points 23 – 28** and includes tables and figures for modelled air quality on a number of key strategic routes:

- Table 1 - Modelled NO<sub>2</sub> Concentrations µg/m<sup>3</sup> of Option 1 and 2
- Figure 1 - Modelled NO<sub>2</sub> Concentrations Option 1 - 2024
- Figure 2 - Modelled NO<sub>2</sub> Concentrations Option 2 - 2024

14. The conclusions of the air quality monitoring are noted in **points 29 – 32**, which are:

- i. **Both** Option 1 and Option 2 achieve air quality compliance on Castle Street.
- ii. 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.
- iii. The chosen option must provide network resilience and support the enabling of future transport network and city development projects

15. **Points 33 – 37** highlight the Strategic Network Challenges and Risks, and include:

- major A roads in residential areas that also include schools and healthcare settings.
- Limited options to offer east-west routes across the city, due to the river running north-south through the city, particularly in light of an incident on any of the key arterial roads (A48, A470, A4232, M4) which can cause significant disruption in the city
- The importance of maintaining network resilience due to increasing pressure on some routes in and out of the city

16. Information on Major New Sustainable Transport schemes are noted in **points 38 – 46** and include:

- Metro: Crossrail
  - ❖ Figure 5: Cardiff Region Tram Network
- Strategic Bus Enhancements
  - ❖ Figure 7: Current Bus Corridors in WeITAG Development Stages
- Strategic Cycle Enhancements
  - ❖ Figure 8: Primary and Secondary Cycle Route Aspirations

17. Protecting and facilitating the transport network development are mentioned in **points 47 and 48**, to meet the needs of Cardiff's [Transport White Paper](#).

The reasons for the proposed recommendation of **Option 1**, are laid out in **points 49 – 54** which provide further information in relation to:

- Ensuring air quality compliance
- Providing network resilience
- Protecting residential areas
- Supporting wider sustainable transport and
- The need for a permanent scheme

18. The next steps in relation to Castle Street and the wider transport network are outlined in **points 55 & 56**.

19. Castle Street requires circa £7m from Welsh Government to take forward the preferred option with building works starting in early 2024 following a tender process.

20. **Point 57** notes previous public consultation in relation to a permanent solution for Castle Street as:

- i. April - May 2019: City Centre Clean Air Plans
- ii. December 2019 - January 2020: Castle Street Option 1
- iii. March - May 2021: Castle Street Option 1 and Option 2

21. The need for further consultation on the chosen option following cabinet approval is noted in **point 58**.

22. Construction costs for the project will be from the Welsh Governments Clean Air funding and fees linked to delivering the project are estimated to be £250,000, from April 2023 onwards, **points 59 & 60**

23. It is noted the maintenance costs for 2 years on the hard infrastructure and for 5 years on soft landscaping are covered by 'construction' costs. However, **point 62**, acknowledges the need for future cleaning and maintenance cost to be discussed and negotiated with relevant teams to ensure the investment is continued.

24. Previous local member consultation it noted in **point 63** and **point 64** highlight their future involvement as part of the Traffic Regulation Order (TRO) process going forward.

25. The Cabinet Report notes the reasons for the recommendations as the following **(points 65 – 69)**:

- To comply with the Welsh Government direction placed on the Council to ensure continued air quality compliance is achieved on Castle Street.
- To ensure that the temporary scheme currently in place is upgraded to a level that satisfies design guidance, road safety and future maintenance.
- The delivery of these highway works are critical to achieving continued air quality compliance on Castle Street.
- 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.
- To maintain network resilience and support the future development of the transport network.

26. The Financial Implications of the scheme are noted in **points 70 – 74**, which note that the delivery of the proposed scheme is dependant on the level of funding secured from the Welsh Government and the Councils commitment to fund the ongoing revenue and maintenance costs.

27. The Legal Implications are recorded in **points 75 – 89**, which include the Equality Act 2010, The Well-Being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure 2011

28. No HR Implications are stated.

29. No Property Implications are documented.

### **Previous Scrutiny**

30. In June 2021 the Committee considered a report to cabinet that provided feedback on the public consultation and modelling work undertaken for Castle Street. The report sought approval for modifications to the road layout to achieve clean air compliance and to commission further modelling and analysis of the impact of these modifications on clean air, congestions and wider city recovery and renewal.

31. Following the meeting a letter was sent to Cabinet (pages 7 – 10) and a response received (pages 11 – 14), the link to this correspondence is [here](#).

32. The committee asked the following:

- Clarity and insight into how much of the decision to pursue ‘Option One’ was due to the results of the consultation.
- How the decisions to re-open up Castle Street to private traffic has been levelled out against the issue of ‘induced demand’ and the principles of clean air.
- In 9 months time, Committee receives a report detailing how closely the actual activity on Castle Street since its re-opening, has resembled the modelling predicted in the papers.
- Further clarity and rationale surrounding if electric buses will be included on this key route, why it has not already been included and when there will be capacity to do so.

## **RECOMMENDATIONS TO CABINET**

33. Cabinet is recommended to:

- *Note the modelling work carried out on the future of Castle St.*
- *Approve Option 1 (Do Minimum) to be delivered as a permanent scheme.*
- *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).*
- *Note and support the aspirations to improve the wider transport network in line with the decision to leave Castle Street open to traffic.*

## **Way Forward**

34. Cllr Dan De’Ath, Cabinet Member for Transport & Strategic Planning and Andrew Gregory, Director of Planning Transport & Environment have been invited to make a statement and answer Member’s questions. They have been asked to make a brief presentation followed by Member’s questions.

## **Legal Implications**

The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters, there are no direct legal implications. However, legal implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any legal implications arising from those recommendations. All decisions taken by or on behalf of the Council must (a) be within the legal powers of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers on behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. Scrutiny Procedure Rules; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances.

## **Financial Implications**

The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters, there are no direct financial implications at this stage in relation to any of the work programme. However, financial implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any financial implications arising from those recommendations.

## **RECOMMENDATION**

The Committee is recommended to:

- i) Consider the information in this report, and the presentation and any further information presented at the meeting; and
- ii) Determine whether they would like to make any comments, observations or recommendations on this matter to Cabinet.

**DAVINA FIORE**

**Director of Governance & Legal Services**

**17<sup>th</sup> April 2023**