

Paper B Business Plan

James White

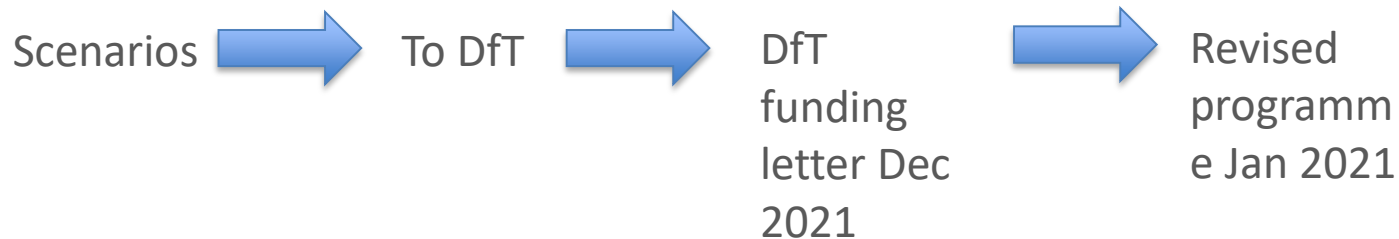
Western Gateway Sub-national Transport Body



- 1) What is the future role of the STB? Should the STB now turn towards facilitating delivery of the study work - helping to produce business cases, funding bids, pilot schemes and provide technical assistance? Or should it focus on a limited amount of new study work?
- 2) Depending on the future role of the STB which Business Plan scenario should the STB present to the Department for Transport for funding? Three scenarios are put forward in the report. Should all three be presented?
- 3) Given the likelihood of limited funding should the STB's focus be on a prioritised programme of activities or should it spread its resources thinly to cover as many topic areas as possible?



- **Scenario One: Continue with existing funding – focused spend**
- **Scenario Two: Ramping up investment and deliver**
- **Scenario Three: Strong Growth**



Scenario One: Continue with existing funding

- Annual budget remains the same at £605,000 (DfT £425,000, £180,000 from nine constituent STB authorities).

DfT funded work would include:

- Decarbonisation - Alternative fuels – Freight & EV Charging
- Strategic rail corridors – continued partnership working with Network Rail and GBR
- Strategic Transport Plan – completion

STB funded work would include:

- Maintaining the Secretariat and Rail Officer Group
- Infrastructure operator engagement & responding to proposals – NR, DfT, National Highways
- Freight – dependent on Freight Strategy, setting up and running a Freight Steering Group



Scenario Two: Ramping up investment and deliver

- Includes everything under Scenario One but requires greater levels of funding to ramp up the programme of investment and delivery.
- Annual budget raised in 22/23 to £665,000, 23/24 to £800,000 and then 24/25 £1,000,000 excluding the £180,000 from the nine constituent STB authorities.
- Strategic rail corridors – continued partnership working and restart the Rail Programme agreed by the Board on 17 March 2021
- *Additional Project* Rural mobility - next steps
- *Additional Project* Freight strategy - next steps
- *Additional Project* Modelling -refresh

To note it may not be possible to start all the areas of work during 2022/23 to 2024/25 so priority decisions will need to be made with a longer-term post 2025 programme.



- Includes everything in Scenarios One and Two increasing the level of investment across the work areas.
- Strongest element of delivery of all three scenarios.
- Annual budget required ramps up in 22/23 to £800,000, 23/24 to £1,200,000 then 24/25 £1,610,000 excluding the £180,000 from the nine constituent STB authorities.
- Significant increase in FTEs and additional Technical and Programme resource.

As with Scenario Two it may not be possible to start all the areas of work during 2022/23 to 2024/25 so priority decisions will need to be made with a longer-term post 2025 programme.



Business Plan scenario	2022/23	2023/24	2024/25	Total
Scenario One <ul style="list-style-type: none"> • STP completion • Alternative Fuels • Strategic Rail Corridors • Great British Railways STB role • Response to MRN and RIS 	£425,000	£425,000	£425,000	£1,275,000
Scenario Two As per Scenario One plus: <ul style="list-style-type: none"> • Rural Mobility • Freight • Modelling update • Rail Strategy programme 	£665,000	£800,000	£1,000,000	£2,465,000
Scenario Three As per Scenarios One and Two plus: <ul style="list-style-type: none"> • Increased investment in projects to build business cases and pilots 	£800,000	£1,200,000	£1,600,000	£3,600,000



- Strategic Cycling
- Data Hub
- International Connectivity and Maritime
- Coach
- Rail Strategy – modal integration, travel plans, guidance framework



- i. Request to approve future role of the STB.
- ii. Request to approve the preferred scenario for the Business Plan (subject to negotiations with DfT and subsequent funding award).
- iii. Request to approve the prioritised work programme within each of the Business Plan scenarios subject to funding award.
- iv. Request to submit preferred Business Plan scenario to DfT for negotiation.
- v. Request to delegate negotiations with DfT to Senior Officers and the Programme Team.
- vi. To note the programme team are recommending that the proposed final Business Plan is presented to the Board in January 2022 following the expected spending review timeline from government.





September 27, 2021



Transport Carbon Audit
Western Gateway STB
Board Meeting – 22nd September 2021

Paul Byron, Technical Director, UK

Agenda

- Assessment of available methodologies
- Review of carbon baselining to date
- Baseline Methodology
- Baseline Results
- Next Steps / Programme / Forecasting and Tool Development (WECA Transport Decarbonisation Study Part B)

Assessment of available methodologies

Tool	Input	Approach	Output	Comment
SCATTER	BEIS	Top down	Transport emissions by local authority.	Data not available on link by link basis for minor roads. Risk of underestimation.
BEIS	Local and regional emissions data.	Top down / Bottom up	Emissions by sector including transport by local authority.	High level. Highly assumptive.
WSP Bespoke	Raw traffic data from road network, bus and rail, TAG emission rates.	Bottom up	Emissions broken down by road type, trip length, origin, journey purpose etc.	Most accurate at regional level. Provides granular detail useful for informing policy.
Environmental Insights Explorer	Active measurement based on Google Maps data.	Bottom up	Emissions from road transport in cities.	Uncertainty over the relevance of factors to UK / specific areas.
DEFRA Emissions Factor tool kit	National Atmospheric Emissions Inventory	Top down / Bottom up	Emission rates from 2018 to 2030.	Does not consider rail/tram emissions or emissions from entire road network.
UK Energy Research transport model	Monetary and social variables (eg. GDP, demographics, prices).	Bottom up	Travel demand, vehicle ownership/use, energy demand, life cycle emissions.	Does not provide the granular detail obtained from using raw traffic data.

Review of Carbon Baselineing To Date (May 2021)

Local Authority	Targets?	Climate Strategies	Baselines? / approach	Completed future baselining?
Bath & North East Somerset	Carbon Neutral - 2030	✓	SCATTER plus business as usual trajectory.	✓
Bournemouth, Christchurch & Poole	Carbon Neutral - 2030	✓	2018 BEIS, 2017 SCATTER	✗
Bristol City	Carbon Neutral - 2030	✓	BEIS plus local vehicle registration and use.	✓
Dorset	Carbon Neutral council - 2040	✓	BEIS, pathways to 2050.	✓
Gloucestershire	Carbon Neutral county - 2045	✓	2017, BEIS	✗
North Somerset	Carbon Neutral - 2030	✓	BEIS	✗
South Gloucestershire	Carbon Neutral county – 2030, UK 100 pledge Net Zero council emissions 2030, Net Zero Area wide 2045.	✓	2017, BEIS plus local vehicle registration and use.	✗
Wiltshire	Carbon Neutral council – 2030; Carbon Neutral county – 2030 ambition	✓	2018, BEIS / business as usual forecast.	✓
WECA	Net Zero - 2030	✓	BEIS/DfT top down	✓
National Highways	Support Net Zero - 2050	✓	Baselining is underway.	✗
Network Rail	Net Zero – 2050 Reductions in infrastructure compared to Control Period 6, 2024 24%, 2029 46%, 2034 75%.	✓	Regional strategy for Wales and West to be commissioned.	✗

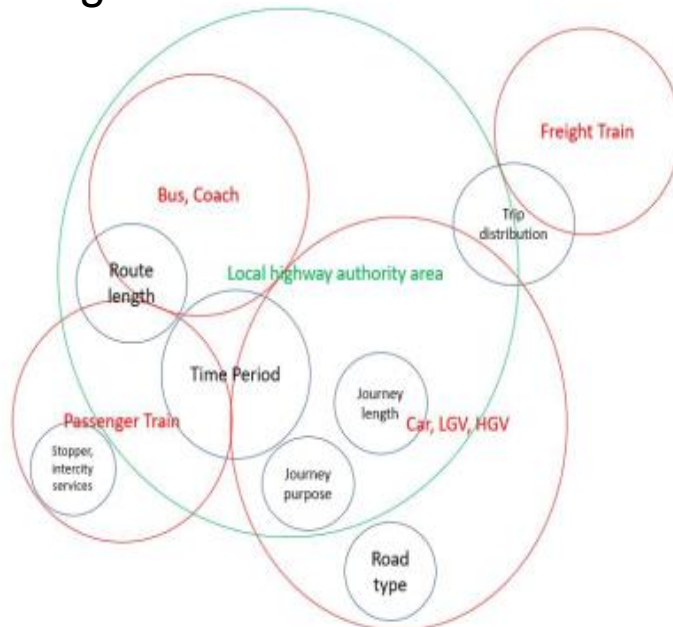
Methodology

Recommendations:

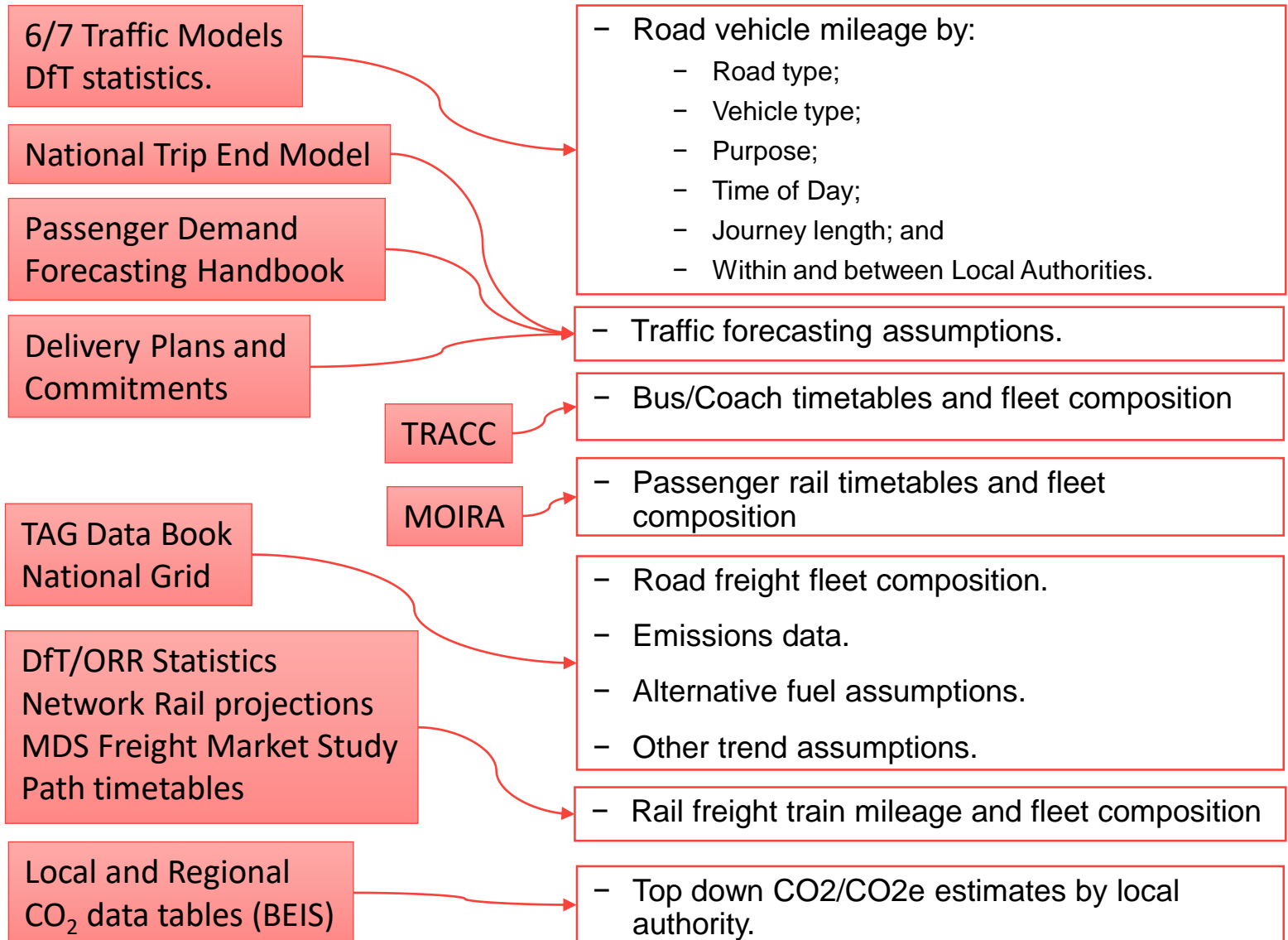
- Bespoke tool to estimate transport carbon for WGSTB.
- Provide a granular breakdown of emissions.
- Use best practice (ISO14064, PAS2080) and present outputs as tCO₂e.
- Align with TAG and LA114.

– Bottom up approach

- Repeatable and transparent.
- Baseline year 2019.
- Best estimate evidence adopted.
- Spreadsheet tool:
 - Input vehicle / train kilometres and hours by fuel type.
 - Estimate fuel consumption by fuel type.
 - Application of emission rates by fuel type.
 - Aligning with published data.
 - Dashboard and open source.



Evidence Sources



Outputs

- EXCEL spreadsheet tool.
- Fully transparent – partners and authorities will be able to interrogate for their respective areas and wider region.
- Dashboard providing high level results.
- Tables containing results with and without BEIS data alignment.
- Calculation sheets where processed data inputs have been entered and showing the derivation of the emissions output.
- Data sheets containing the parameters and coefficients used in the calculation process.

Output – WGSTB 2019

Population: 3,087,113

Total Estimated Annual tCO2e Emissions from Transport:

WG Tool Estimate: 5,225,101

BEIS Published Estimate: 6,116,966

Emissions per Capita (WGSTB Estimate): 1.7

Net zero target: 2050

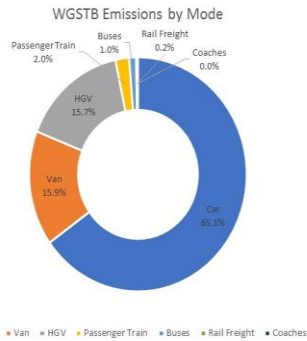
Local Authority Summary 2019

(Car, Rail and Public Transport)

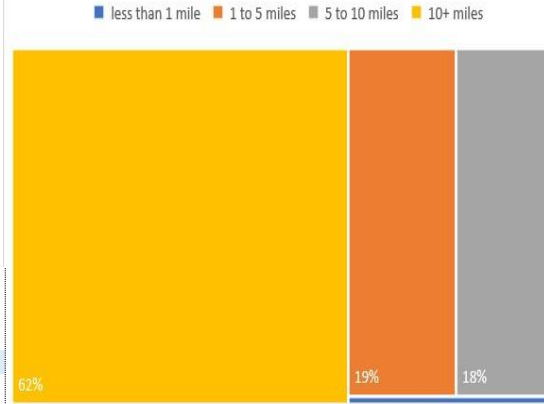
Local Authority	2019 tCO2e
Bath & North East Somerset	221,773.15
Bournemouth, Christchurch & Poole	386,055.89
City of Bristol	435,633.67
Dorset	665,289.24
Gloucestershire	1,197,918.30
North Somerset	460,887.61
South Gloucestershire	776,718.73
Wiltshire	1,069,416.71

WECA 2019 tCO2e (including Rail Freight) 1,897,961.30

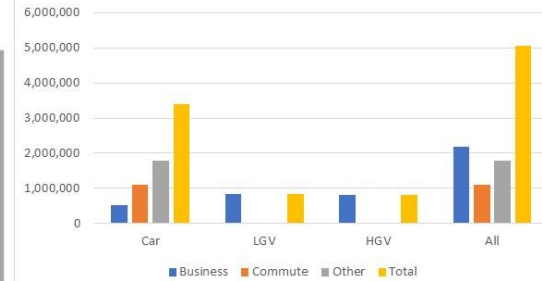
WGSTB 2019 tCO2e (including Rail Freight) 5,225,101.32



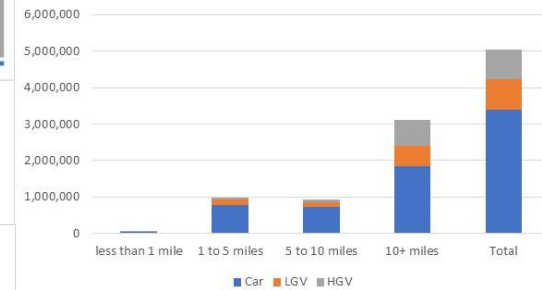
WGSTB Vehicle Emissions: Proportion by Trip Length



WGSTB Emissions by Vehicle Type and Journey Purpose 2019 (tCO2e)



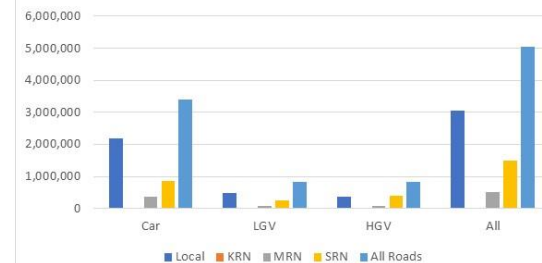
WGSTB Emissions by Trip Length



WGSTB Emissions from Road Transport



WGSTB Emissions by Road and Vehicle Types, 2019 (tCO2e)



Next Steps / Programme / Forecasting Tool Development

WECA Transport Decarbonisation Study

- Part A – Options and Issues
 - Phase 1 Evidence Base – December 2021.
 - Phase 2 Development of Options – February 2022.
- Part B – Transport Decarbonisation Tool for Western Gateway
 - Options to Levers – workshop / ASI analysis / logic mapping.
 - Produce Business as Usual forecasts for 2030, 2040 and 2050 – October 2021.
 - Build in sensitivity testing tool – December 2021.
 - Produce a Central forecast for WECA reflecting post COVID behaviour and DfT Decarbonisation plans – November 2021.
 - Produce Scenario 1 forecast for WECA reflecting effect of known commitments – December 2021.
 - Produce Scenario 2 forecast for WECA reflecting emerging package of options – January 2022.

Thank you

Questions?