

Criteria	RAIL (heavy)		RAIL (light)		BUS	
	Option 2a (i)		Option 2a (ii)		Option 2b	
	Score	Justification	Score	Justification	Score	Justification
Objectives	++	Improve journey times by public transport between population centres and key employment opportunities, thereby supporting socioeconomic growth in North Wales. This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). Overall this option makes public transport more attractive and is expected to increase demand from 3.9% of the market to 18.5% of the market (1tp).h).	++	This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). Overall this option makes public transport more attractive and is expected to increase demand from 3.9% of the market to 18.5% of the market (1tp).h).	+	This option would have a neutral impact on journey times due to failing to offer an improvement on existing public transport provision. Overall this option makes public transport more attractive and is expected to increase demand from 3.9% of the market to 5.6% of the market.
	++	Reduce carbon impacts and greenhouse gas emissions from transport, thereby adapting to the impact of climate change. By providing more efficient public transport, and reducing the time of travelling on public transport and providing train connections with very short waiting times, may encourage people out of their cars and travel across different modes of transport, this modal shift could contribute to reducing carbon emissions from the transport network. This option is likely to include more embedded carbon initially due to the new heavy rail infrastructure, but is likely to generate more carbon savings with modal shift through shorter journey times and higher comfort than bus options. Further quantitative appraisals would be required to quantify the beneficial impacts due to a reduction in GHG and Carbon emissions.	++	By providing more efficient public transport, and reducing the time of travelling on public transport and providing train connections with very short waiting times, may encourage people out of their cars and travel across different modes of transport, this modal shift could contribute to reducing carbon emissions from the transport network. Further quantitative appraisals would be required to quantify the beneficial impacts due to a reduction in GHG and Carbon emissions.	+	Reducing the fleet of diesel vehicles on the network is likely to have a beneficial impact on the reduction of emissions. Further quantitative appraisals would be required to quantify the beneficial impacts due to a reduction in GHG and Carbon emissions.
	++	Better connect local communities by public transport between Amlwch and Bangor to core public services including educational opportunities. 133% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people), meaning that there will be improved access to key education and healthcare providers in the vicinity of this route.	++	133% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people), meaning that there will be improved access to key education and healthcare providers in the vicinity of this route.	+	33% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 9,527 people), and 0.1% from Bangor (from 95,350 people to 95,446 people), meaning that there will be improved access to key education and healthcare providers in the vicinity of this route.
	++	Create an integrated sustainable transport network that is safe, reliable and affordable, providing a realistic alternative to the private car. There are currently a high number of incidents on average per year on key routes in the scheme area. Switching to rail would reduce the risk of incidents as it reduces car trips on the highway. The cost of travel in this option will be competitive with the private car. Overall, this option represents a realistic alternative to the private car.	++	There are currently a high number of incidents on average per year on key routes in the scheme area. Switching to rail would reduce the risk of incidents as it reduces car trips on the highway. The cost of travel in this option will be competitive with the private car. Overall, this option represents a realistic alternative to the private car.	+	There are currently a high number of incidents on average per year on key routes in the scheme area. Switching to bus would reduce the risk of incidents as it reduces car trips on the highway, however still utilises highway space. The cost of travel in this option will be competitive with the private car. Overall, this option represents a realistic alternative to the private car.
	+++	Support the visitor economy in North Wales by improving public transport accessibility to key destinations. This option would enhance connectivity to key visitor attractions by rail. These include the Dingle Nature Reserve at Llangefni, Parys Mountain at Penysam, Copper Kingdom, Anglesey Coastal path between Benllech and Amlwch, which traverses the Anglesey AONB. This also aligns with the Wales on Rails initiative.	+++	This option would enhance connectivity to key visitor attractions by rail. These include the Dingle Nature Reserve at Llangefni, Parys Mountain at Penysam, Copper Kingdom, Anglesey Coastal path between Benllech and Amlwch, which traverses the Anglesey AONB. This also aligns with the Wales on Rails initiative.	+++	This option would enhance connectivity to key visitor attractions by bus. These include the Dingle Nature Reserve at Llangefni, Parys Mountain at Penysam, Copper Kingdom, Anglesey Coastal path between Benllech and Amlwch, which traverses the Anglesey AONB.
	+	Support delivery of the North Wales Metro proposals. Aligns with the long term aspiration for North Wales metro with regard to connecting Amlwch and Gaerwen by rail, however the primary aspiration is the reinstatement of the historic rail corridor.	+	Aligns with the long term aspiration for North Wales metro with regard to connecting Amlwch and Gaerwen by rail, however the primary aspiration is the reinstatement of the historic rail corridor.	+	In line with metro proposals for bus corridor enhancements. However, primary aspiration is for reinstatement of Gaerwen to Amlwch rail corridor.
WellTAC Impacts	++	Social & Cultural Accidents: Rail is one of the safest modes of transport in Great Britain. There were no passenger fatalities as a result of a train accident in 2018-19. There is currently a high number of road incidents on average per year on key routes in the scheme area. Switching to rail would reduce the risk of incidents as it reduces car trips on the highway. Accessibility: 133% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people). Personal affordability: The passenger cost is competitive with the private car. Therefore, this option would reduce levels of social isolation, which is often related to unreliable public transport services or services that do not go to the right places or at the right times.	++	Accidents: Rail is one of the safest modes of transport in Great Britain. There were no passenger fatalities as a result of a train accident in 2018-19. There is currently a high number of road incidents on average per year on key routes in the scheme area. Switching to rail would reduce the risk of incidents as it reduces car trips on the highway. Accessibility: 133% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people). Personal affordability: The passenger cost is competitive with the private car. Therefore, this option would reduce levels of social isolation, which is often related to unreliable public transport services or services that do not go to the right places or at the right times.	+	Accidents: Switching to bus would reduce the risk of incidents as it reduces car trips on the highway, however still utilises highway space. Accessibility: 33% more people would be able to reach Llangefni within 60 minutes from their homes (increasing from 7153 people to 9,527 people), and 0.1% from Bangor (from 95,350 people to 95,446 people). Personal affordability: The passenger cost is competitive with the private car. Therefore, this option would reduce levels of social isolation, which is often related to unreliable public transport services or services that do not go to the right places or at the right times.
	-	Environmental The construction of a new coastal light rail route between Amlwch and Bangor would involve the construction of a new rail route between the two Amlwch and Llangefni, where it then meets the proposed reinstated inland alignment. This would follow the same alignment as the coastal light rail route but would involve the installation of a ~2.3km tunnel from Pen-y-sarn to north of Llaneddug. It is likely this option would result in a significant level of land take and would significantly change the landscape in the area. This would likely result in large levels of vegetation and potentially woodland being removed, affecting landscape character, visual impact and potentially protected species. This option passes through Tyn Rhos caravan park and the western end of the town of Benllech. A large section of the proposed route passes through the Anglesey AONB. This option is located 470m west of the Anglesey Terns SPA at its closest point, and the route passes through the eastern edge of the Craig Wen SSSI boundary. Sensitive receptors including residential dwellings in proximity to the proposed route would be subject to dust, noise and visual disturbances due to the presence of construction machinery and installation of associated infrastructure and would also be subject to further operation impacts. It is likely that an Environmental Impact Assessment will be required to further quantify impacts, and also identify necessary mitigation measures. Further consents and permits will be required, in addition to consultation with NRW, Cadw and other Statutory bodies This option would have a large adverse impact on landscape / townscape, a moderate adverse impact on biodiversity, historic environment, and noise, and a slight adverse impact on the water environment, and air quality. The carbon savings of the scheme would have to be further assessed but are likely to be in the moderately beneficial range given the expected embedded emissions and modal shift savings.	-	The construction of a new coastal light rail route between Amlwch and Bangor would involve the construction of a new rail route between the two Amlwch and Llangefni, where it then meets the proposed reinstated inland alignment. It is likely this option would result in a significant level of land take and would significantly change the landscape in the area. This would likely result in large levels of vegetation and potentially woodland being removed, affecting landscape character, visual impact and potentially protected species. This option passes through Tyn Rhos caravan park and the western end of the town of Benllech. A large section of the proposed route passes through the Anglesey AONB. This option is located 470m west of the Anglesey Terns SPA, at its closest point, and the route passes through the eastern edge of the Craig Wen SSSI boundary. Sensitive receptors including residential dwellings in proximity to the proposed route would be subject to dust, noise and visual disturbances due to the presence of construction machinery and installation of associated infrastructure and would also be subject to further operation impacts. It is likely that an Environmental Impact Assessment will be required to further quantify impacts, and also identify necessary mitigation measures. Further consents and permits will be required, in addition to consultation with NRW, Cadw and other Statutory bodies This option would have a large adverse impact on landscape / townscape, a moderate adverse impact on biodiversity, historic environment, and noise, and a slight adverse impact on the water environment, and air quality. The carbon savings of the scheme would have to be further assessed but are likely to be in the moderately beneficial range given the expected embedded emissions and modal shift savings.	0	This option would see an addition to the number of buses on the road network between Amlwch and Bangor. This option makes the assumption that the bus route would utilise the existing highway network between Amlwch and Bangor, that no construction works are required and that the use of hydrogen powered or electric buses would be preferred. Given the infrequent journey times and insignificant number of buses that will be added to the highway network, this option will have a neutral impact on noise, air quality, landscape / townscape, biodiversity, historic environment, and the water environment. Further quantitative analysis would be required to quantify any potential impacts on air quality, noise and GHG.

Scoring
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	Economic	++	<p>This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). 133% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people).</p> <p>By providing connectivity by rail, this option would offer better reliability and reduced risk of incidents compared to travelling on the highway.</p> <p>Overall, this option would enable more reliable and efficient journeys between key settlements and employment destinations between Amlwch and Bangor, thereby supporting economic growth.</p>	++	<p>This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). 133% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people).</p> <p>By providing connectivity by rail, this option would offer better reliability and reduced risk of incidents compared to travelling on the highway.</p> <p>Overall, this option would enable more reliable and efficient journeys between key settlements and employment destinations between Amlwch and Bangor, thereby supporting economic growth.</p>	+	<p>This option would have a neutral impact on journey times due to failing to offer an improvement on existing public transport provision.</p> <p>33% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 9,527 people), and 0.1% from Bangor (from 95,350 people to 95,446 people).</p> <p>By providing connectivity by bus, this option would offer better reliability and reduced risk of incidents due to reducing car trips on the highway, however still utilises highway space.</p> <p>Overall, this option would enable more reliable and efficient journeys between key settlements and employment destinations between Amlwch and Bangor, thereby supporting economic growth.</p>
Critical Success Factors	Potential Value for Money	+	<p>VfM at this stage considers the well-being of the public, which comprises of economic, social and environmental impacts of the option. This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). 133% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people), meaning that there will be improved access to key employment sites, leisure facilities, education and healthcare providers in the vicinity of this route.</p> <p>This option would have a moderate adverse impact on landscape / townscape, historic environment, water environment, biodiversity and noise and a slight adverse impact on air quality.</p> <p>Overall, this option would lead to a slight beneficial impact on the well-being of the public.</p>	+	<p>VfM at this stage considers the well-being of the public, which comprises of economic, social and environmental impacts of the option. This option would reduce the journey time between Amlwch and Bangor by 6% (from 52 minutes to 48.9 minutes). 133% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 16,696 people), and 0.4% from Bangor (from 95,350 people to 95,778 people), meaning that there will be improved access to key employment sites, leisure facilities, education and healthcare providers in the vicinity of this route.</p> <p>This option would have a moderate adverse impact on landscape / townscape, historic environment, water environment, biodiversity and noise and a slight adverse impact on air quality.</p> <p>Overall, this option would lead to a slight beneficial impact on the well-being of the public.</p>	0	<p>VfM at this stage considers the well-being of the public, which comprises of economic, social and environmental impacts of the option. This option would have a neutral impact on journey times due to failing to offer an improvement on existing public transport provision.</p> <p>33% more people would be able to reach Llangefní within 60 minutes from their homes (increasing from 7153 people to 9,527 people), and 0.1% from Bangor (from 95,350 people to 95,446 people).</p> <p>This option will have a neutral impact on noise, air quality, landscape / townscape, biodiversity, historic environment, and the water environment.</p> <p>Overall, this option would have a neutral impact on the well-being of the public.</p>
	Supplier Capacity & Capability	++	<p>There is a mature market for construction of rail infrastructure and heavy rail vehicles, and options are available for operators of services.</p>	+	<p>The market for construction of the infrastructure is mature, however the light rail market is less mature.</p>	++	<p>Additional services could be achieved through variations to existing contracts.</p>
	Potential Affordability	--	<p>The heavy rail coastal route is significantly more expensive than reuse of the former alignment due to the civil infrastructure required. The gradients mean that a section of tunnel would be required, which adds significantly to the costs. Ongoing subsidy is anticipated during operations.</p>	--	<p>A light rail specification allows for a reduced amount of civils works due to more relaxed track alignment criteria, resulting in a lower cost. However, this would still be higher than reuse of the former corridor. Ongoing subsidy is anticipated during operations.</p>	++	<p>As existing road infrastructure can be used, significantly lower capital costs would be required compared to rail.</p>