Appraisal Summary Table

Date produced:	27 April 2018	**Contact:**	
Name of scheme:	Magor and Undy Station	**Name**	
Description of scheme:	To construct a new station on the South Wales Mainline relief lines at Magor and Undy. It is expected that there would be 2 tph per direction, with services to Newport, Cardiff and Bristol, possibly extending to Taunton and Cheltenham. The station would consist of a platform either side of the railway line connected by the existing footbridge and underpass, with the latter lowered to improve access. Station facilities will be minimual, likely limited to basic seating and a ticket machine, although additional services may be provided by the adjacent community centre. No car parking is to be provided but drivers will be able to drop off passengers.	**Organisation**	
		Role	Promoter/Official

	Impacts	Summary of key impacts	Assessment: Quantitative	Assessment: Qualitative	Assessment: Monetary £(NPV)	Assessment: Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	Travel to and from Magor and Undy will be quicker for all journey purposes, particularly compared to road journeys to Cardiff/Bristol. Journey times for business journeys starting or ending in Magor/Undy will reduce by up to 10 minutes per person per day (compared to driving to Severn Tunnel Junction station). Business users who currently drive and park at Severn Tunnel Junction would also save on parking costs of up to £4 per day and potentially also vehicle operating costs. Business users at Severn Tunnel Junction station or using the local road network will also benefit from reduced congestion, pressure on car parking. For train operating companies, a minor increase in train operating costs (due to the additional stop) will be compensated for by an increase in passenger numbers. For bus operators, slight revenue reduction associated with services along the B4245, as some passengers shift to rail.	Value of journey time changes(£): £2.3m Net journey time changes (£): 0 to 2min: Not assessed; 2 to 5min: Not assessed; > 5min: Not assessed	N/A	£1.8million	Not assessed
Economy	Reliability impact on Business users	Business users switching to rail will benefit from improved journey time reliability compared to equivalent journeys by car, which suffer from high levels (and varying levels) of congestion into either Cardiff or Bristol. Business users previously parking at Severn Tunnel Junction will also be able to remove the journey time uncertainty associated with finding a parking space. High level of benefit affecting a relatively small number of individuals.	Benefits to approximately 60 trips per day (30 individuals per day) in the opening year	Slight Beneficial	Not monetised	
Economy	Regeneration	The improvement in connectivity will contribute to addressing regional economic objectives. The station will support regeneration efforts in Newport by encouraging Magor and Undy residents to travel to Newport for employment, education and shopping.	Not assessed	Slight Beneficial	Not monetised	
Economy	Wider Impacts	New station will improve the attractiveness of Magor/Undy for investment by employers in the nearby business parks. It will also improve the attractiveness of the village centre for locating business, as both customers and staff would be able to travel by rail (improved access to markets / labour market).	Not assessed	Slight Beneficial	Not monetised	
Environmental	Noise	Varied noise impacts. Frequency of trains passing through the villages will remain unchanged, although stopping trains may lead to increased noise from braking and acceleration. Increased noise due to vehicles dropping off passengers close to the station entrance might also affect a small number of residential properties. Expected reduction in veh-kms along the B4245 and through Rogiet, as Magor/Undy residents will not need to drive to Severn Tunnel Junction. Short term noise increase during construction.	Not assessed	Neutral	£0.1 million (benefit from reduced veh-kms)	Not assessed
Environmental	Air Quality	Slight negative impact on air quality at the station due to trains stopping / accelerating. This will be countered by a reduction in veh-kms along the B4245 and on Station Road in Rogiet. Short term impact of construction.	Not assessed	Neutral	Not monetised	Not assessed
Environmental	Greenhouse gases	Slight reduction in greenhouse gas emissions due to reduced veh-kms on the road network overall.	Change in non-traded carbon over 60y (CO2e): - Change in traded carbon over 60y (CO2e): -	Slight Beneficial	£0.6 million	
Environmental	Landscape	The station is not expected to have a landscape impact as new platform structures are lower than the existing footbridge and new overhead electrical stanchions and wiring.	N/A	Neutral	N/A	
Environmental	Townscape	The station is not expected to impact on the townscape of Magor or Undy, as new structures are less intrusive than the existing footbridge and stanchion / wiring structures.	N/A	Neutral	N/A	
Environmental	Historic Environment	No historic landscape/environment features or archaeological remains have been identified by Cadw within 2km of the site. The site is located within the Caldicot Level, which is valued as a cultural resource of exceptional importance. There may be some impact from local interest in the Ancient Orchard on Three Fields Site, which will be lost.	N/A	Slight adverse	N/A	
Environmental	Biodiversity	Works will take place within the Gwent Levels SSSI. There is potential for disturbance of habitats during construction and trees considered to have bat roost potential will be lost. Habitat surveys are required to establish whether any protected species are present.	N/A	Slight Adverse	N/A	
Environmental	Water Environment	The proposed station and associated works bound Magor Marsh/Gwent Levels, which comprise a complex reen system. The station is unlikely to affect the flow or quality of these watercourses. The scheme must be designed to avoid discharge into reens and ensure drainage is managed appropriately.	N/A	Neutral	N/A	
Social	Commuting and Other users	Travel to and from Magor and Undy will be quicker for all journey purposes, particularly compared to road journeys to Cardiff/Bristol. Journey times for commuting/other journeys starting or ending in Magor/Undy will reduce by up to 10 minutes per person per day (compared to driving to Severn Tunnel Junction station). Journey times for those previously cycling to Severn Tunnel Junction will reduce by approximately 15 minutes per person per day, and for those previously catching a bus they will reduce by up to 50 minutes per person per day. Rail passengers who currently drive and park at Severn Tunnel Junction would also save on parking costs of up to £4 per day and potentially also vehicle operating costs. Rail users at Severn Tunnel Junction station or commuters / other journeys on the local road network will also benefit from reduced congestion and pressure on car parking.	Value of journey time changes(£): £11.5m Net journey time changes (£): 0 to 2min: Not assessed; 2 to 5min: Not assessed; > 5min: Not assessed	N/A	£11.5million	Not assessed
Social	Reliability impact on Commuting and Other users	Commuters / other users switching to rail will benefit from improved journey time reliability compared to equivalent journeys by car, which suffer from high levels (and varying levels) of congestion into either Cardiff or Bristol. Users previously parking at Severn Tunnel Junction will also be able to remove the journey time uncertainty associated with finding a parking space.	Benefits to approximately 360 trips per day (180 individuals per day) in the opening year	Moderate Beneficial	Not monetised	
Social	Physical activity	The 'Walkway' station is within walking distance of most residents of Magor and Undy and no car parking is provided. There is likely to be an increase in residents walking or cycling to the station as part of their journey, instead of driving to Severn Tunnel Junction station, or driving direct to their destination. Reduced walking and cycling for a small number of Magor/Undy residents who would otherwise walk or cycle to Severn Tunnel Junction.	Potential benefit to approx. 200 individuals per day	Moderate Beneficial	Not monetised	
Social	Journey quality	Passengers who previously drove to Severn Tunnel Junction station will experience an increase in journey quality through the removal of the uncertain driving and parking aspect of their journey. Those who shift from car journeys or bus to rail are also likely to experience increased journey quality. The additional passengers using the train to or from Magor & Undy may increased loading and increased potential for crowding on trains.	Potential benefit to approx. 200 individuals per day	Moderate Beneficial	Not monetised	
Social	Accidents	Slight reduction in accidents possible due to removal of car trips from the B4245 between Magor/Undy and Rogiet. Potential accident reductions across the wider network due to mode shift from car to rail. Potential safety issues close to the new station entrance must be considered during the detailed scheme design. Risks may be presented by the increased pedestrian and cyclist traffic as well as vehicles dropping off/picking up passengers.	Approximately 9.5million veh-kms per year removed from the road network.	Slight Beneficial	£2.1million (benefit from reduced veh-kms)	Not assessed
Social	Security	The sense of personal security for station users must be considered during the design of the station, ensuring measures such as visibility, lighting and CCTV are provided as appropriate.	N/A	Neutral	N/A	Not assessed
Social	Access to services	Improved access to services in Newport, Cardiff and Bristol, especially for those who do not drive. For those who switch from car to rail, or cease driving to Severn Tunnel Junction, journey times and costs will be reduced and the journey made easier.	N/A	Moderate Beneficial	N/A	Not assessed
Social	Affordability	Cost savings for passengers who currently pay parking charges or bus fares to Severn Tunnel Junction station. Switching from driving to rail for other journeys may also reduce costs, especially to destinations where car parking is expensive.	N/A	Slight Beneficial	N/A	Not assessed
Social	Severance	Likely no impact. There is a possible positive impact if a footpath to Whitewall is created to link to the station footbridge.	N/A	Neutral	N/A	Not assessed
Social	Option and non-use values	Positive impact within Magor and Undy as residents will have access to the rail network within walking distance.	More than 6,000 residents will benefit from access to a new rail station.	Moderate Beneficial	Not monetised	
Public Account	Cost to Broad Transport Budget	PVC: £7.2m (taking account of capital expenditure, ongoing maintenance, capital renewals, optimism bias at 25%)	PVC: £7.2m BCR: 1.6	N/A	PVC: £7.2m	
Public Account	Indirect Tax Revenues	Loss of indirect tax revenues due to reduced vehicle-kms and reduced fuel sales (resulting from mode shift to rail)	Loss of indirect tax revenue: £4.3 million	N/A	- £4.3 million	