

Economic Criteria Weightings Table – Raw Data

Number	Economic Criteria	Key Attributes	Red	Yellow	Blue	Score	Ranking
Ec1	Cost of Construction	<ul style="list-style-type: none"> • • Scope and methods (bridges, tunnels, standard of roads) applicable? • External economic conditions (available funds) • Materials as per existing standards • Underground construction versus above ground construction • Length of road project • Cost of upgrading other roads vs. building RHE • Type of construction (egg Bridge vs. embankments) • Cost of construction now to avoid environmental damage with relocation of proposed port. • Cost of construction netting across wetlands • Managing run-off in the wetlands • Need for the link not proven • What are the traffic congestion causes (egg freight/normal traffic?) • Road should be designed to its ultimate Freeway configuration & not compromised in terms of its traffic function, leading to greater economic value to broader region. • Cost of construction of RHE vs. rail to freight goods (i.e. increase upgrading rail freight from 15% to say 40% to reduce trucks on existing roads). • Does the budget take into consideration the cost of building to a high standard? • Use of wire road barriers or road safety barriers to reduce cost associated with accident trauma/fatalities • Is the total resourcing package sufficient for all needs i.e. fauna and pedestrian underpasses? • Environmental and access compromise on promises/needs when money runs out • Is the budget sufficient for world's best practice? • Pervious pavement - may increase construction costs but reduce drainage infrastructure, reduce impact on environment 	14	6	38	92	1
Ec2	Traffic Congestion	<ul style="list-style-type: none"> • Decreasing waiting time - where? • Congestion at the Mac • Congestion in the local area • Maintaining road connections • Maintaining short cuts/rat runs • Stop/start movements • Traffic diversion • Lowering fuel consumption 	8	2	35	63	3
Ec3	Future Costs Associated with Road	<ul style="list-style-type: none"> • Operations • Maintenance • Upgrades • Work in process when and if it is built,(should be known by experience). • Savings to road users & transport (truck) operators & the community by designing to a high standard to reduce maintenance costs on vehicles (eg brakes, tyres etc.) • Extension will help community by moving goods & services in the least cost and most efficient way • Toll road? • Costs associated with time delays in approval process - depending on option could become Federal issue eg indigenous/environmental approval • Heritage listing of Hope Road • Consider cost savings for other gvt agencies in bldg or not bldg road • Effects on local business • Economic impact on the Port - container freight, efficient freight movement 	2	3	44	56	5

Ec4	Efficient Freight movement	<ul style="list-style-type: none"> • Load sizes • Number of lanes (already set in standards) • Suitability for heavy vehicles (aren't they getting larger). • Stop-start movements • Use of air brakes • Ability to maximise use of loaded vehicles/full use of return journeys • See Point 7 • Efficient automobile movements • Access costs need to be considered • Economic importance of moving freight 	4	9	41	71	2
Ec5	Accessibility	<ul style="list-style-type: none"> • Access to schools • Access to industrial areas • Access to shopping centres • Access to Murdoch Activity Centre (Fiona Stanley Hospital) all private vehicles? • Access to Jandakot Airport • Access to Fremantle Port • Access to Inner and Proposed Outer Harbour • Access to Latitude 32 • Access to Cockburn Coast and other major roads/ areas • Movement at intersections and interchanges • Access to social amenities (footpaths, public open spaces etc) Latitude 32, Cockburn Coast and other major roads/ areas provision for flexibility ie. improvements in moving traffic 	1	7	45	62	4
Ec6	Need for link?		0	0	1	1	31
Ec7	Freight vehicles versus private transport		0	0	1	1	31
Ec8	Connectivity	<ul style="list-style-type: none"> • Funding for road not yet obtained • Smooth connections • Roundabouts vs intersections vs traffic lights • More volume of trucks & traffic using/hitting stock • Road (North and South) • More transport to and from Fremantle Port • High St status not determined. No confirmation from Council to be upgraded. • A road to nowhere • Integrate roads to local needs/ traffic/transport network planning • Connecting Roe to coast - construction and transport planning 	1	2	35	42	10
Ec9	Maintenance Costs	<ul style="list-style-type: none"> • Damage to road due to road trains 	0	0	8	8	19
Ec10	Accessibility	<ul style="list-style-type: none"> • RHE does have/provide accessibility to MAC, Jandakot Airport, Fremantle Port, Proposed Outer Harbour etc • Pedestrian and cyclist & cost saved from this • Scout Group • Cockburn Wetlands Centre • Yangebup & Kardinya to Bibra Lake & Wetlands Centre • Cost of accessibility for children, to schools and recreation 	5	2	27	46	8
Ec11	Offsets	<ul style="list-style-type: none"> • Cost of offsets• Economic considerations of alternative options 	0	0	3	3	24
Ec12	Construction	<ul style="list-style-type: none"> • Cost of construction • Cost of operation/maintenance • Collateral cost ie upgrade of other routes (maybe additional LGA/local residents costs • Cost of bridge/interchange design 	0	0	14	14	17

Ec13	Future considerations	<ul style="list-style-type: none"> • Consider cost of ultimate needs ie. 6 lanes/light rail and its role in overall freight network • Maintenance cost of ongoing impact n environment and heritage • Retrofitting cost of noise reduction in adjacent residential areas ie Roe 7 (east of Kwinana • Cost of grade or road surface for minimising noise • Suggestion that potential users will not prefer the route (ie they will use Russell Road) • Cost of getting potential users to use Roe over other routes (marketing it as an option) • Design for future development - population needs 	1	1	23	28	13
Ec14	Tourism Opportunities	<ul style="list-style-type: none"> • More tourists to Bibra Lake/Water Park • Access • Moving people, bringing in money 	0	0	6	6	20
Ec15	Alternate methods of travel	<ul style="list-style-type: none"> • Will cut two suburbs • Utilise alternate methods eg. Cyclist paths, pedestrian • Encourage less cars, less car use or public transport 	1	5	30	43	9
Ec16	Land Value	<ul style="list-style-type: none"> • Will it devalue existing residential areas?• Commercial land may increase due to increased access/mobility 	1	3	16	25	14
Ec17	Outsourcing to foreign companies		0	0	0	0	36
Ec18	Quality	<ul style="list-style-type: none"> • Need to accommodate wetlands • Is it the most cost efficient way of using the space in terms of needs of community (may miss commercial, go through residential areas)? 	0	0	4	4	22
Ec19	Limit number of stops/forma intersections	<ul style="list-style-type: none"> • Stop start • Traffic • Access points 	0	0	6	6	20
Ec20	Design	<ul style="list-style-type: none"> • Truck route - higher standard • Design life of 50 yrs vs 10 yrs • Impact • Tunnel - not discounted due to cost • Completion of a ring road for transport planning in Perth • Consider the overall impact on Perth 	7	3	24	51	6
Ec21	Reduction of future cost	<ul style="list-style-type: none"> • Maintenance of other roads and generally • Design for larger volume & no need to retrofit later • Economic evaluation to ensure a ""life cost"" is reduced • Use of existing roads to reduce costs 	0	1	1	3	24
Ec22	Cost of managing "flow-on effects" from Stock Road	<ul style="list-style-type: none"> • Access to Port - impact to wider network • Safety • Increase in rates/tax associated with infrastructure - knock on effects of new road increase existing LGA rates 	1	1	7	12	18
Ec23	Resumption of Land	<ul style="list-style-type: none"> • Cost of resuming property • Murdoch University 	0	0	0	0	36
Ec24	Planning for tomorrow	<ul style="list-style-type: none"> • Impact to wider network • Leaving a positive legacy - investment of project into community • Proposed development 	0	0	3	3	24
Ec25	Efficiency	<ul style="list-style-type: none"> • Attractive to freight vehicles • Reduce use of Leach Highway 	2	0	31	37	11
Ec26	No embankments/reduction of footprint		0	0	2	2	29

Ec27	Cost of Planning	<ul style="list-style-type: none"> • Cost of construction may be impacted if planning/design within wetlands area carried out last 	0	1	0	2	29
Ec28	Cost Benefit	<ul style="list-style-type: none"> • Reduce congestion on other roads (eg. Leach Hwy, South St) • Compromise leads to additional cost to the community • Environmentally & socially sound, particularly the lake • Cost benefit analysis in terms of the needs of the state vs constructing RHE eg. should we spend money on teachers, nurses, hospitals etc? • Cost of constructing a tunnel below the wetlands 	4	1	20	34	12
Ec29	Property Devalue	<ul style="list-style-type: none"> • Bibra Lake property values - Forrest Road • Noise pollution - cost to residents • Noise/Air pollution - cost to residents, surrounding areas • Compensation to residents - damage due to vibration during construction and operation of RHE 	2	2	39	49	7
Ec30	Economic cost in the loss of eco-tourism	<ul style="list-style-type: none"> • Wetlands centre • Value of pristine environment • Impact on species 	0	0	3	3	24
Ec31	Freight by Rail	<ul style="list-style-type: none"> • Should be emphasis • Define route 	2	2	10	20	15
Ec32	Infrastructure around the road	<ul style="list-style-type: none"> • Accessways • Cycleways • Cost beyond building of the road 	0	0	1	1	31
Ec33	Indigenous Eco-tourism		0	0	1	1	31
Ec34	Economic impact of NOT having the road	<ul style="list-style-type: none"> • Industrial areas • Infrastructure (access to) • Ports • Road • Efficiency • Spaghetti junction 	0	0	1	1	31
Ec35	Stock Road	<ul style="list-style-type: none"> • Costs & impacts 	0	0	3	3	24
Ec36	Local traffic	<ul style="list-style-type: none"> • Balance or separating out of impact on local traffic movements and needs of regional freight movements 	0	0	4	4	22
Ec37	Health effects	<ul style="list-style-type: none"> • Compromise of health? • Personal cost/cost to residents 	0	2	15	19	16
	TOTALS		56	53	542	816	(score)