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Michael A P Taylor

The decision making context and approach in Australia

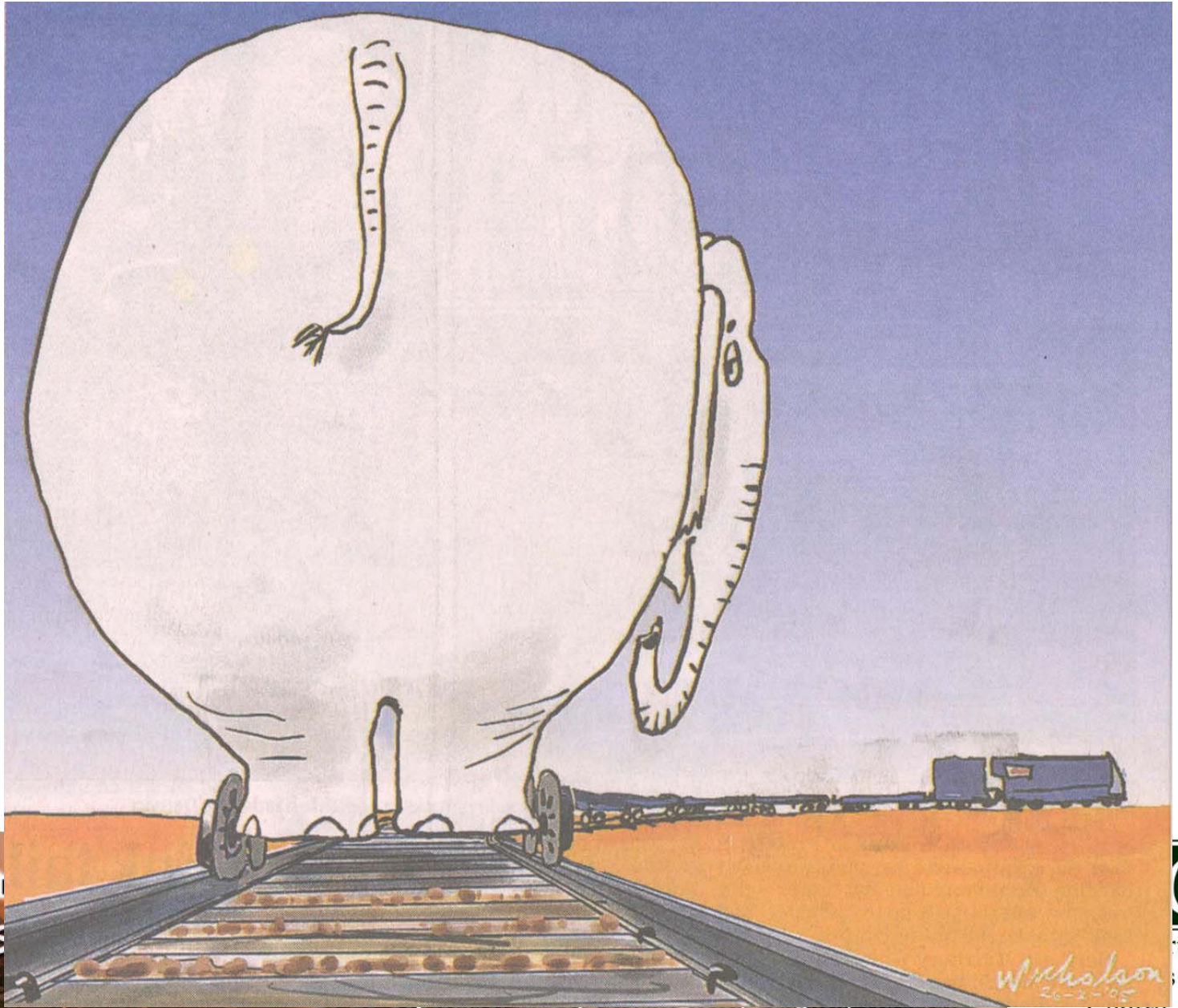
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The Weekend Australian, 26-27 Feb 2005



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions

Are we doing the right thing?



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions

What are the most important issues to respond to?



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions

How should we respond?



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions

What is the 'big picture'?



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Strategic Planning

- A disciplined effort to produce fundamental decisions that determine strategy
- Involves understanding the present and anticipating the future
- Involves serious questions
- Despite its discipline, it does not flow smoothly from one step to next – a creative process involving iteration, complex and challenging





Program and project evaluation and assessment

- **AUSLINK**

- strategic planning framework
- holistic, multimodal perspective for Australian land transport
- focus on network and corridors
- program and project appraisal and evaluation using consistent methods and parameters

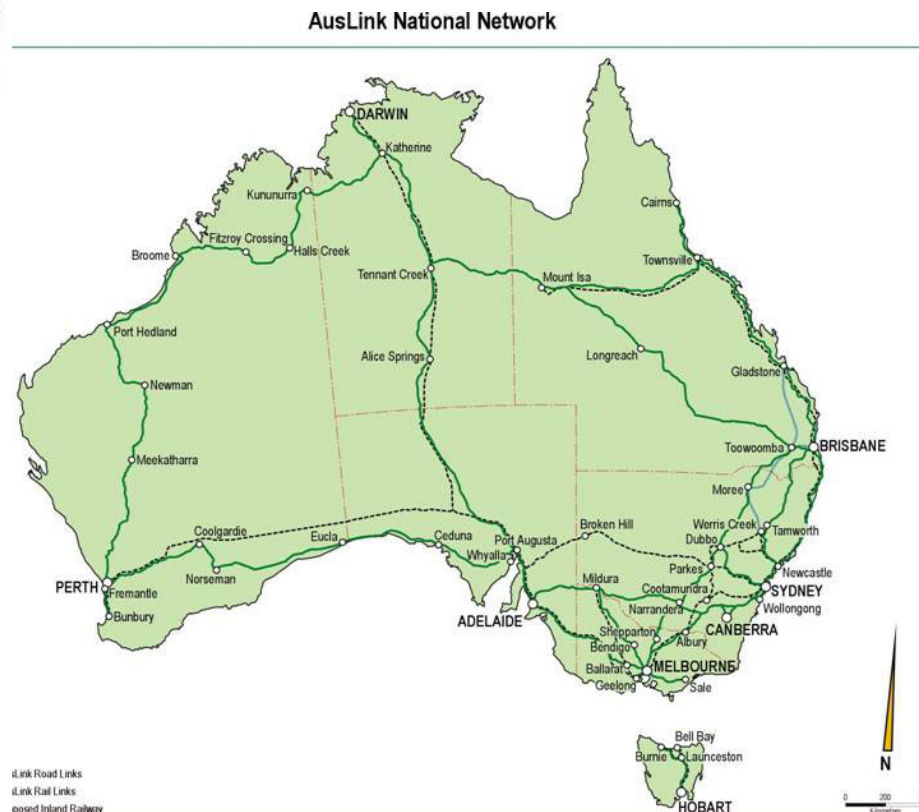
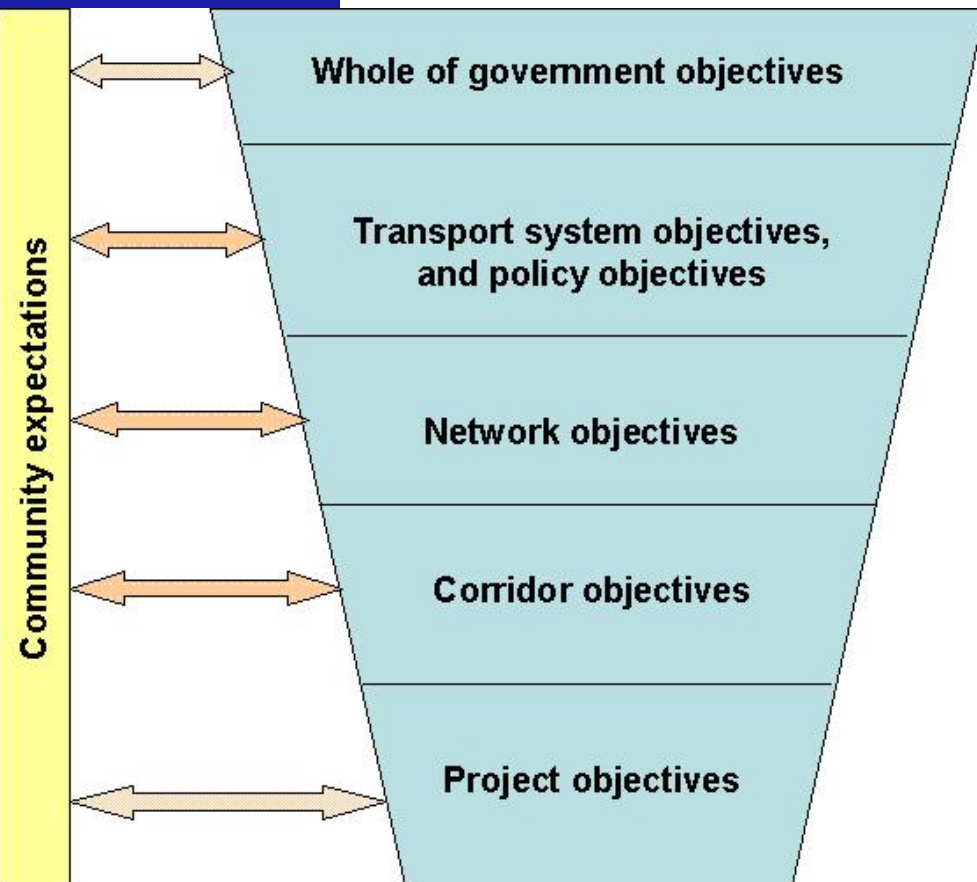




Program and project evaluation and assessment

- **AUSLINK**

- strategic planning framework
- focus on network and corridors





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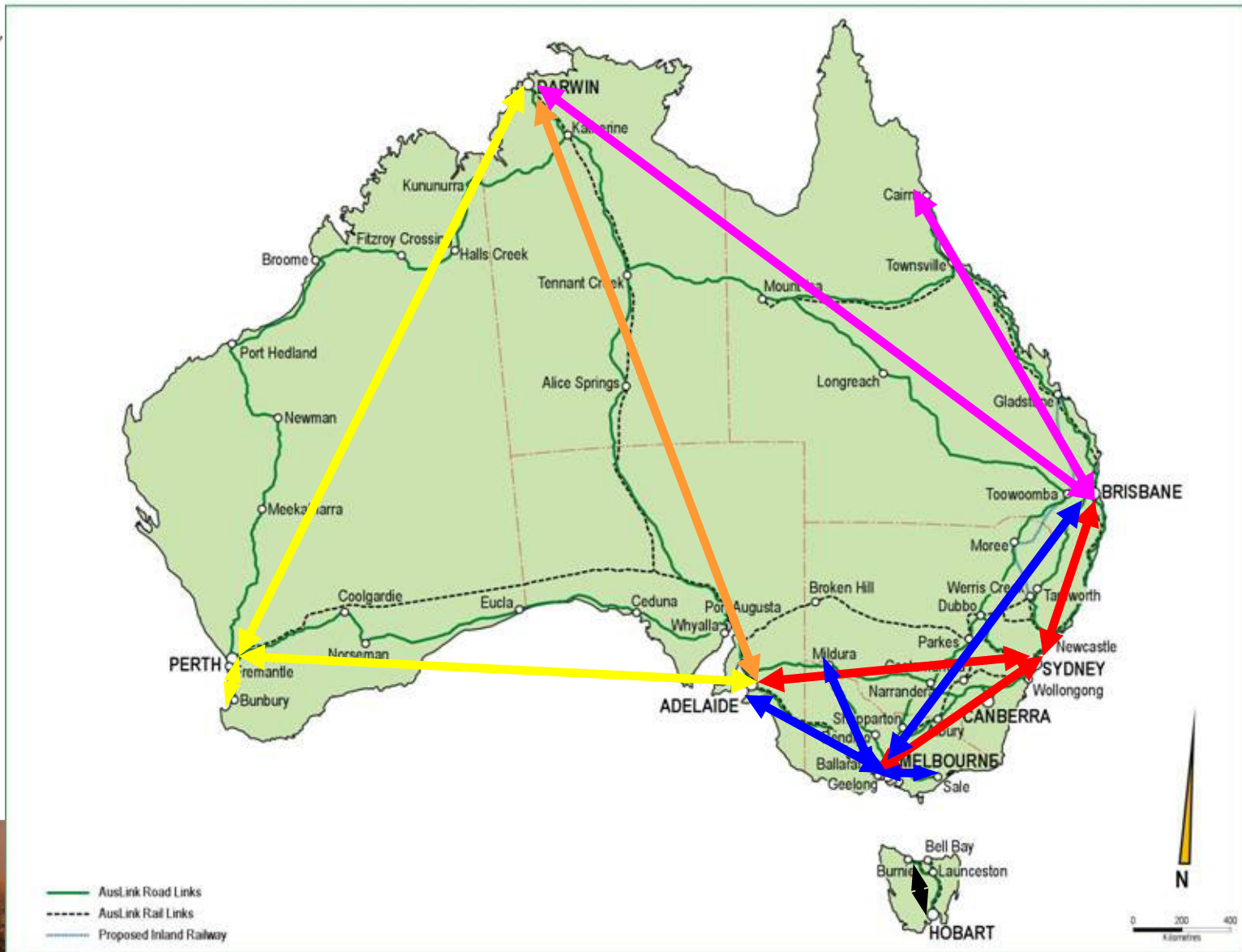
Corridors



AUSLINK

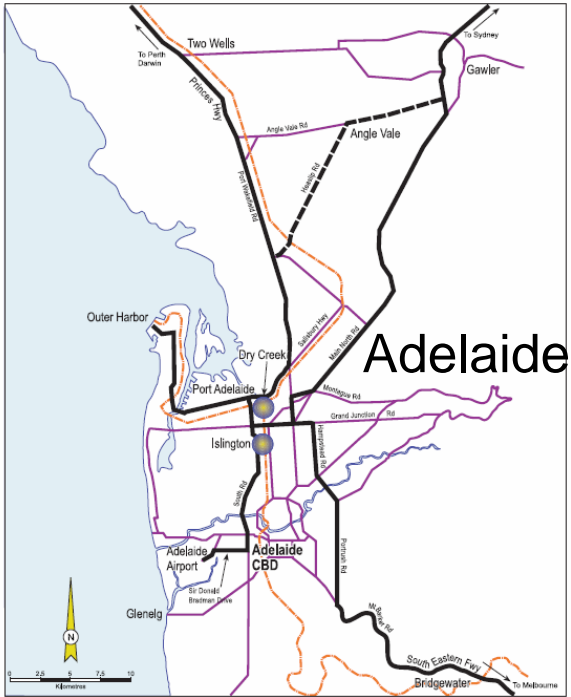


AusLink National Network





Urban corridors



- National Network - Road Links
- - - National Network - Road links on completion to replace sections of the Hume and Western Highways
- - - National Network - Rail Links
- Other Roads
- Intermodal Terminal



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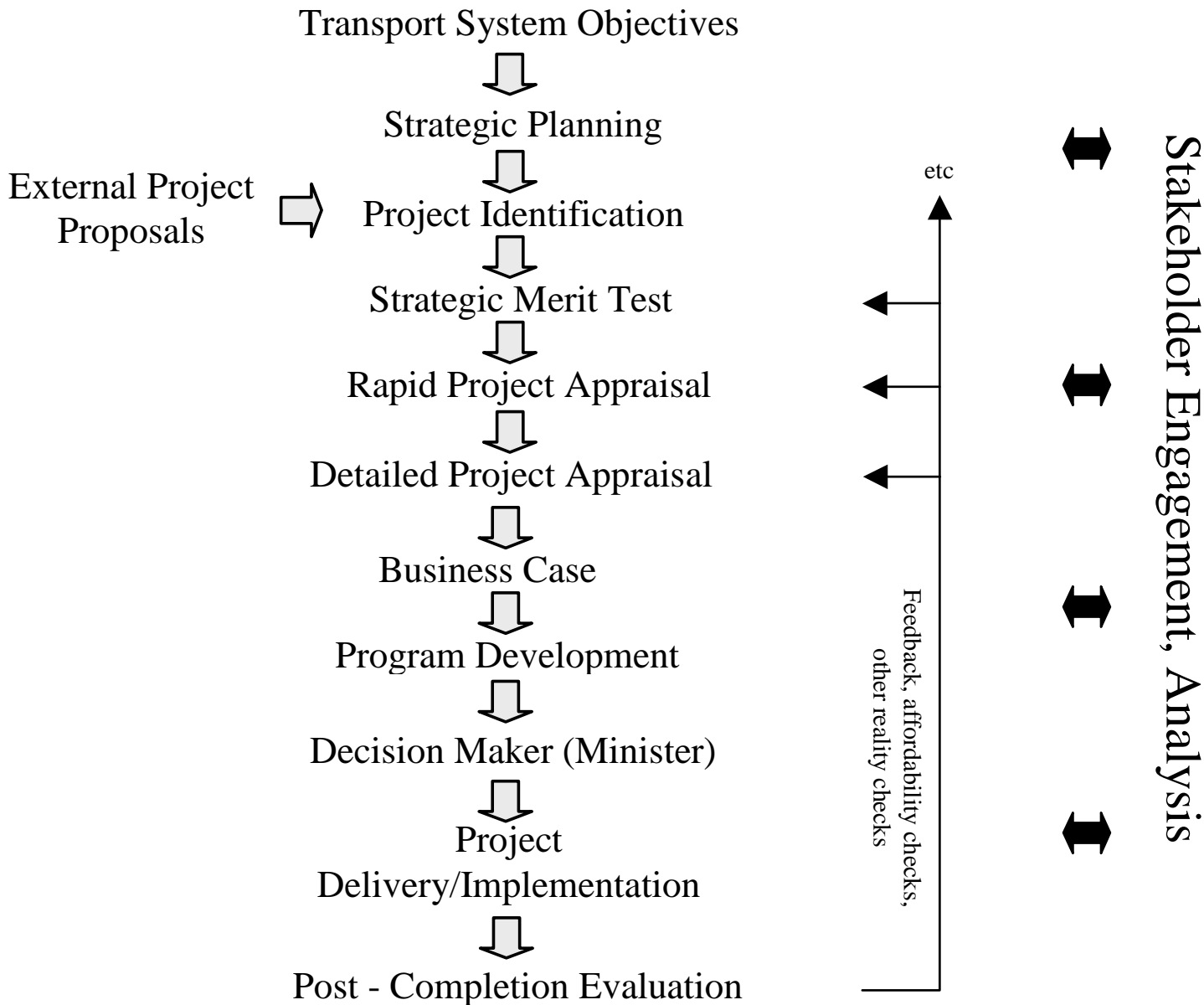


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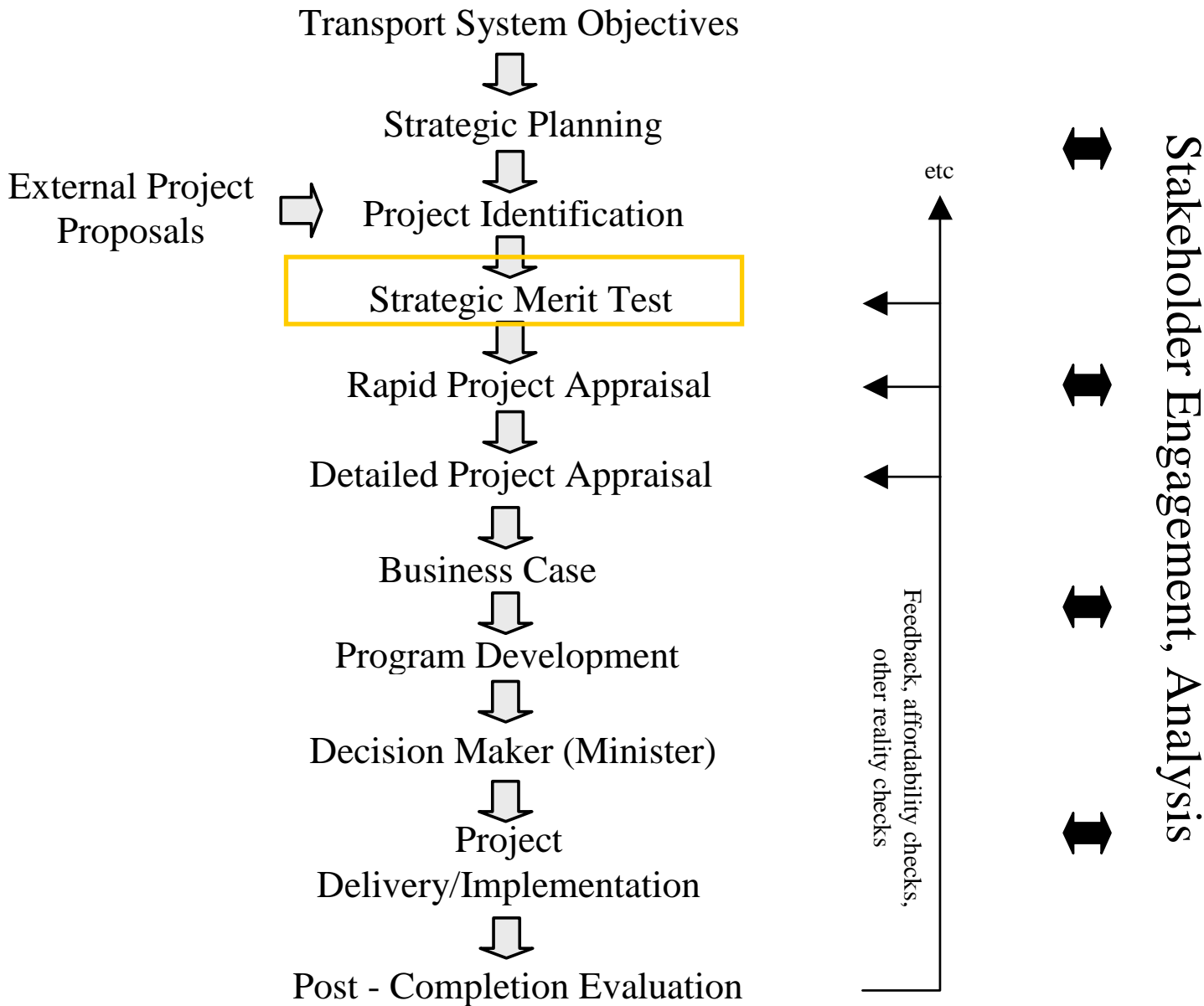
Assessment framework in Auslink





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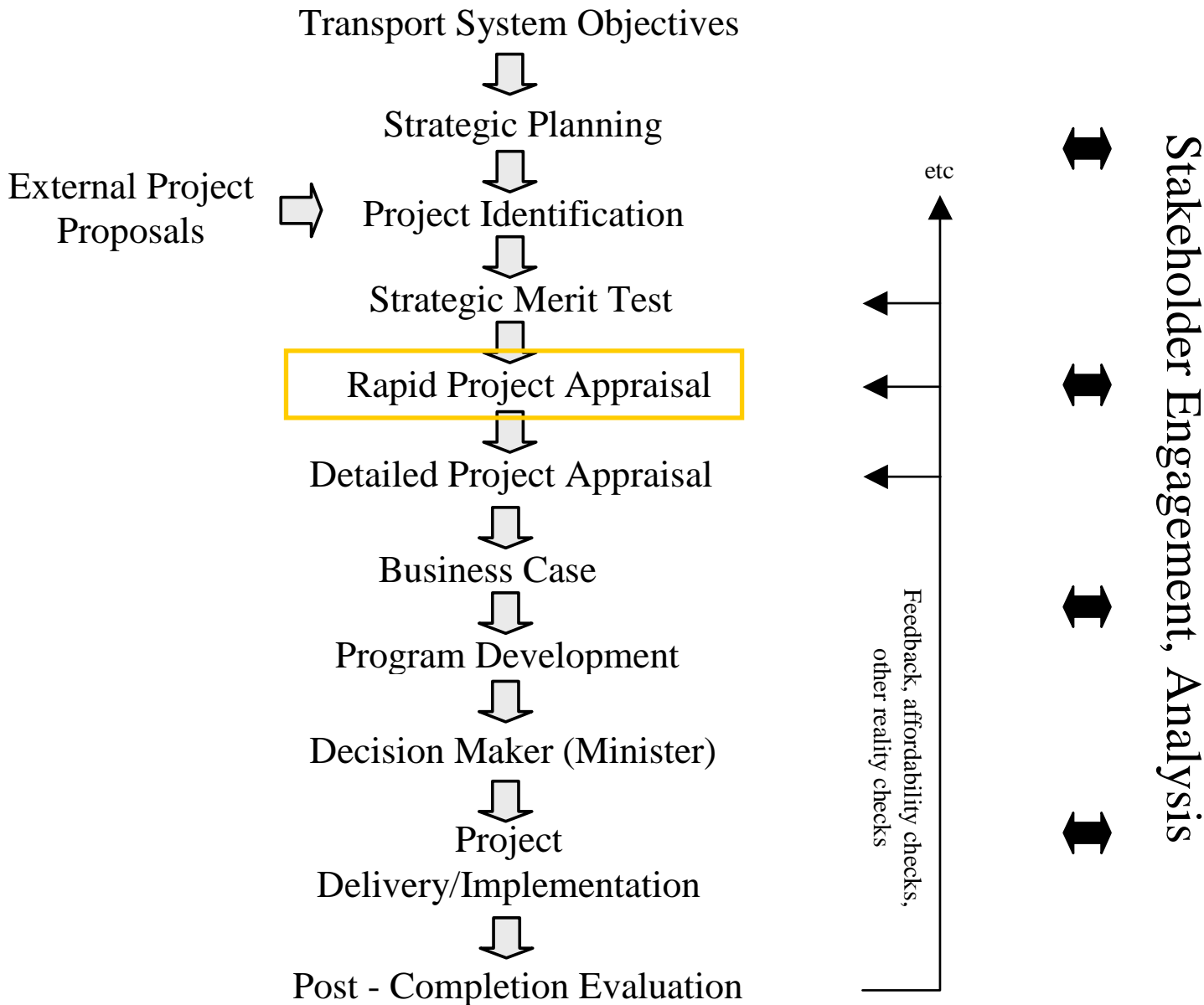
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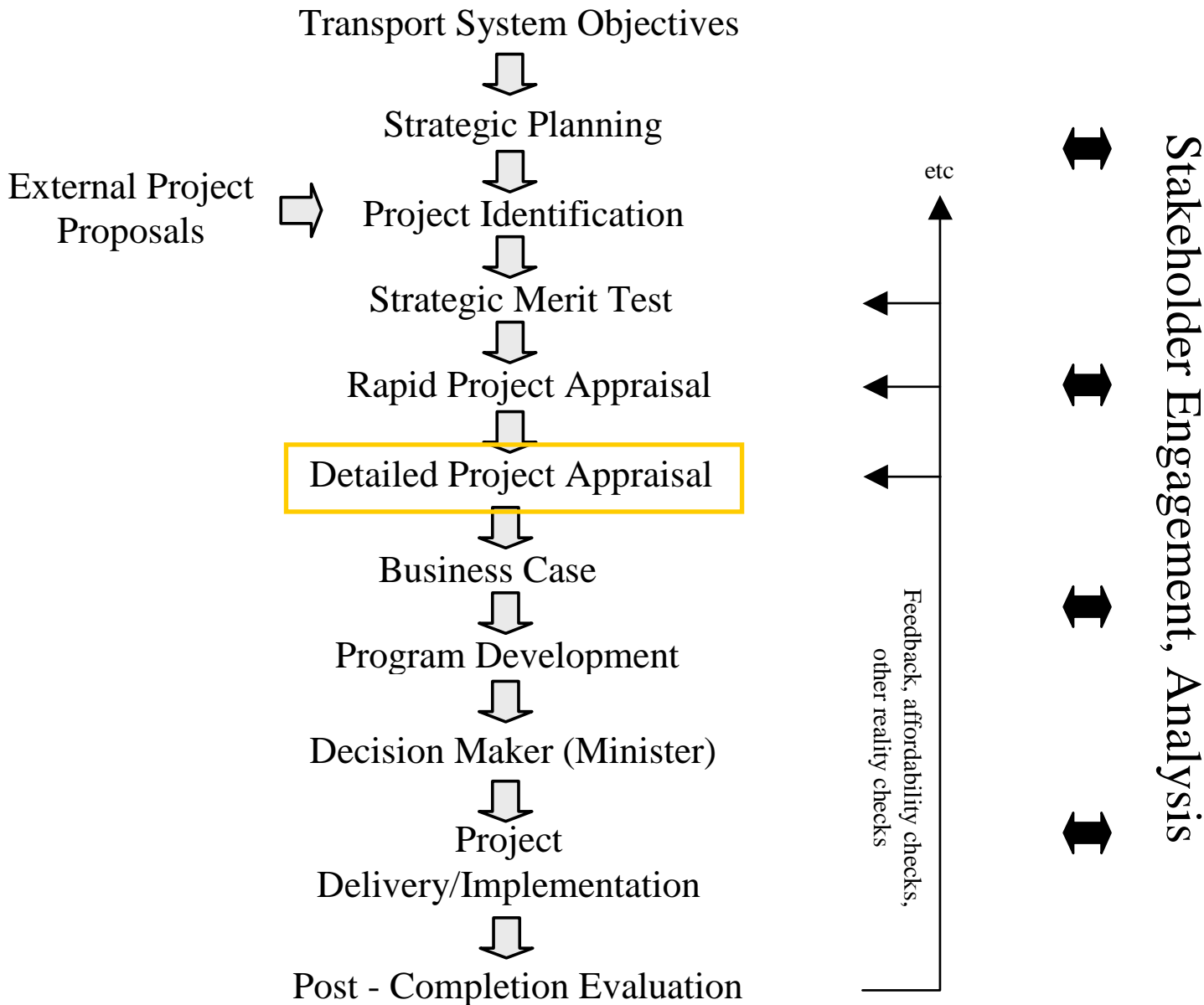
Assessment framework in Auslink





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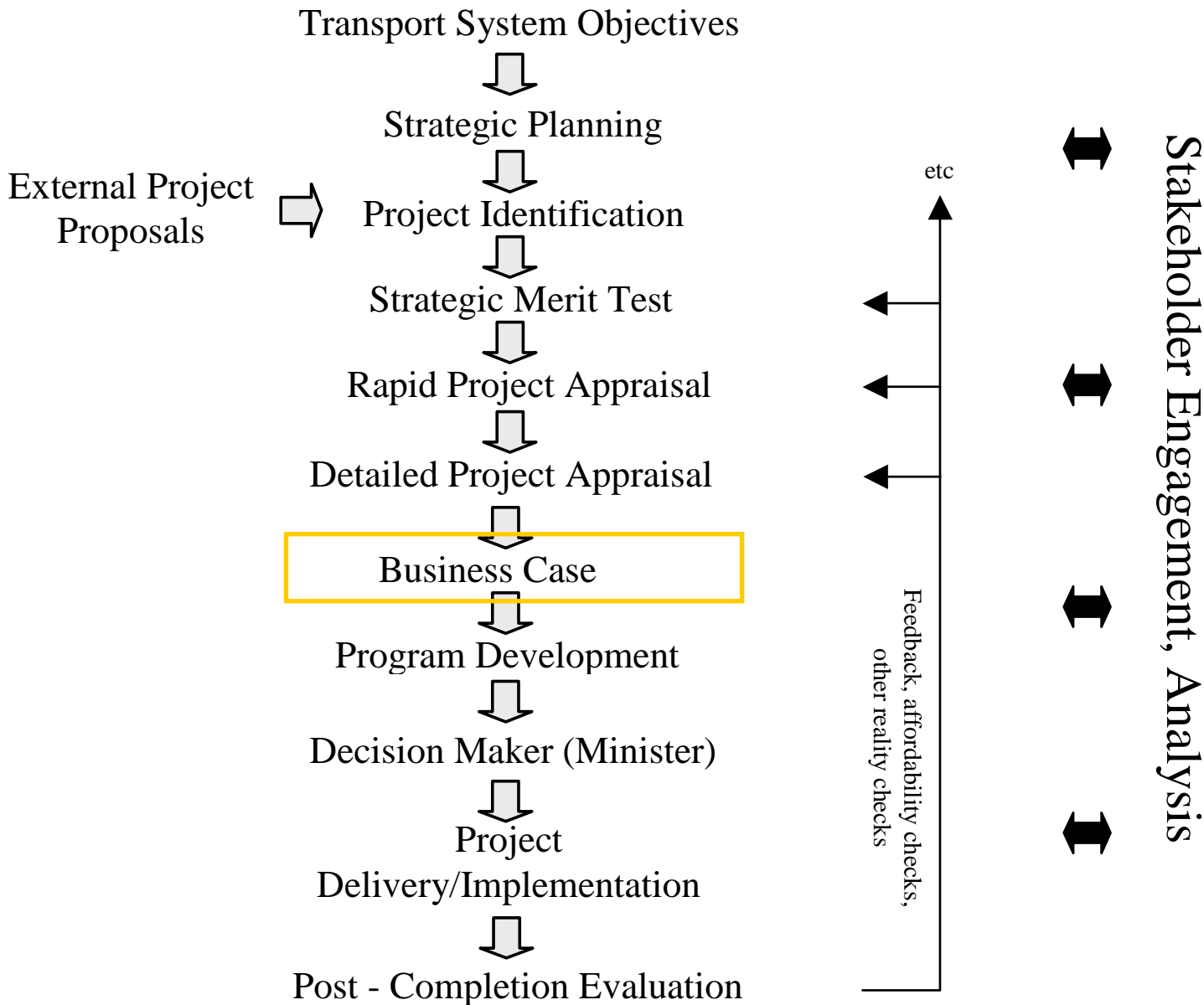
Assessment framework in Auslink





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Assessment framework in Auslink





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AUSLINK's guiding principles

- Select and rank projects according to specified objectives
- Cost-effective
- Defensible, comprehensive, transparent, rigorous
- Consistent across projects
- Able to compare different types of projects including different modes



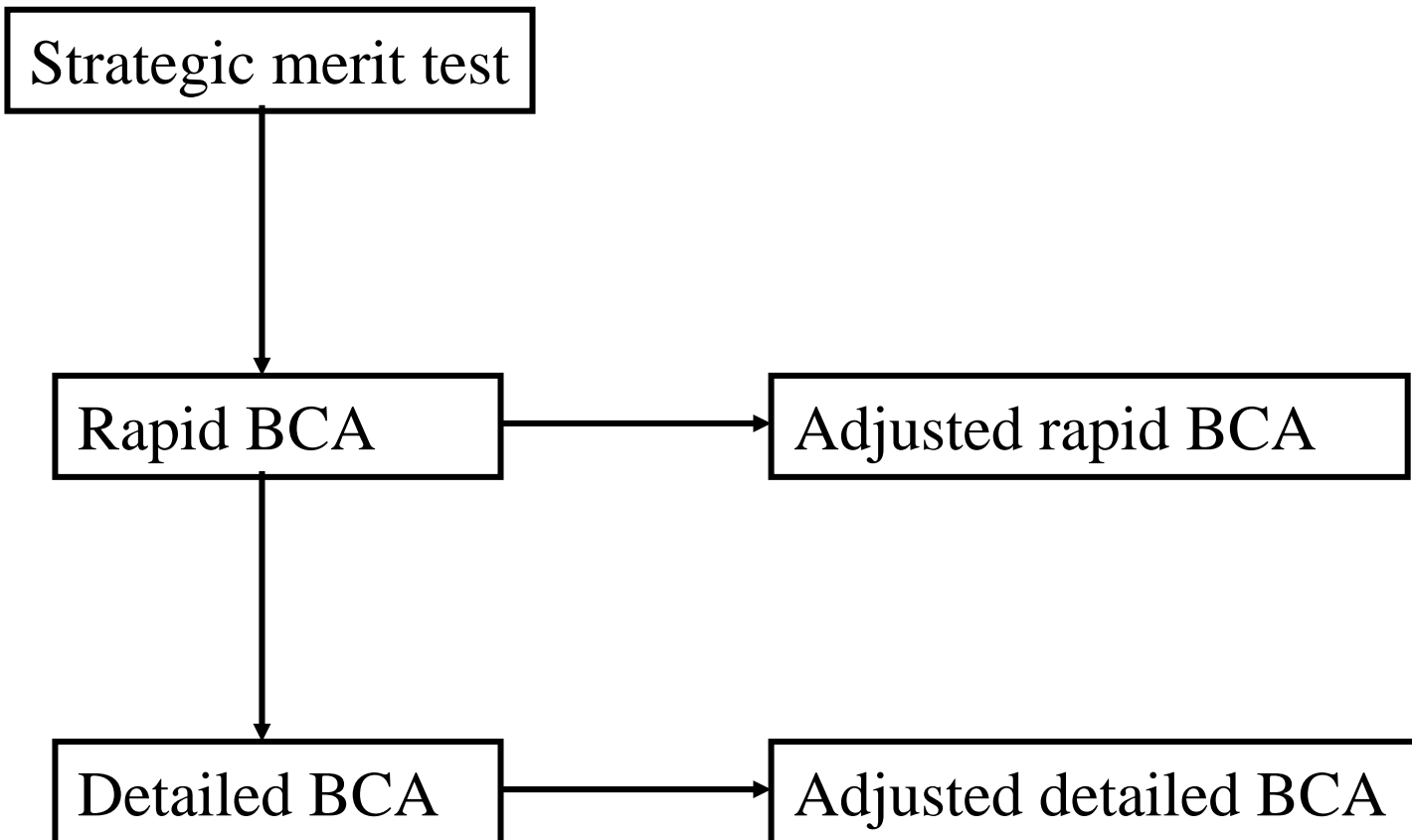
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Specific project assessment methodology - three stages



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Strategic Merit Test

- Consists of a series of questions
- Alignment with government strategies and policy choices
- Consideration given to
 - alternative solutions
 - options
 - broader context of the project



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Aim of the Strategic Merit Test

- Filters projects into those that should be
 - taken to next stage of assessment
 - revised
 - abandoned
- Living document that develops into the Business Case
- Assists with ranking of projects for programme development



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Rapid and Detailed BCA

- **Rapid BCA**

- cost-effective way of gauging whether a project is likely to pass a detailed BCA
- assesses the ‘economic merits’ of options
- supports the SMT by helping to clarify objectives of the project
- application to small-scale projects

- **Detailed BCA**

- full economic analysis of larger projects



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Adjusted BCA

- **Optional new technique**
 - BCA-based multiple-objective decision-making tool
- **Hybrid of BCA and multi-criteria analysis that uses weights**
 - retains the monetary measuring rod of BCA
- **Weights applied to benefits and costs to reflect government objectives**
- **May be employed at both the rapid and detailed stages of project appraisal**





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Business Case

- Combines the results of all the assessments and analysis
- Presents information about proposal to decision-maker
- Self-standing document
 - supported by detailed documents e.g. Environmental Impact Statement and BCA, financial analysis, social impact assessments, regional and distributional impact assessment, employment impact assessment, etc.



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Analysis and forecasting ...

- Travel demand modelling
- Market segmentation
- Demand elasticities
- Mode choice



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Analysis and forecasting ...

- Travel demand modelling
- Market segmentation
- Demand elasticities
- Mode choice

Key tasks in the planning process





Analysis and forecasting ...

- Travel demand modelling
- Market segmentation
- Demand elasticities
- Mode choice

Key tasks in the planning process

... which demand

- *analytical skills and methods*
- *access to good data*



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Market segmentation

- Travel is a *derived* demand
- Different market segments have and/or value different characteristics
- Spatial patterns are important (e.g. travel distance)
- Temporal patterns too (i.e. time of travel)



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The background of the seminar banner features a cityscape at sunset or sunrise, with a modern train in the foreground.



Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------



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Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------



Work
Education
Shopping
Personal business
Work related
Social
Recreational
Etc





Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------

Regular
Infrequent
Occasional
'One off'



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Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------

Peak period
Business hours
Off-peak
Late night
Weekday
Weekend
Etc



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Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------

Local
To city centre
Inter-suburban
Regional
Inter-city
Inter-state
International
Origin-destination*



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Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------

Local
 To city centre
 Inter-suburban
 Regional
 Inter-city
 Inter-state
 International
 Origin-destination*

* *Within a locality (local)*
Separated, good access
Separated, difficult access
Through



Sustainable Urban



Market segmentation

- A classification of passenger travel ...

Purpose	Frequency	Trip timing	Travel distance	Transport mode
---------	-----------	-------------	-----------------	----------------

Private vehicle

Driver/rider
Passenger

Public transport

Rail
Bus
Tram/LRT
Taxi
Ferry
Air
Boat

Non-motorised

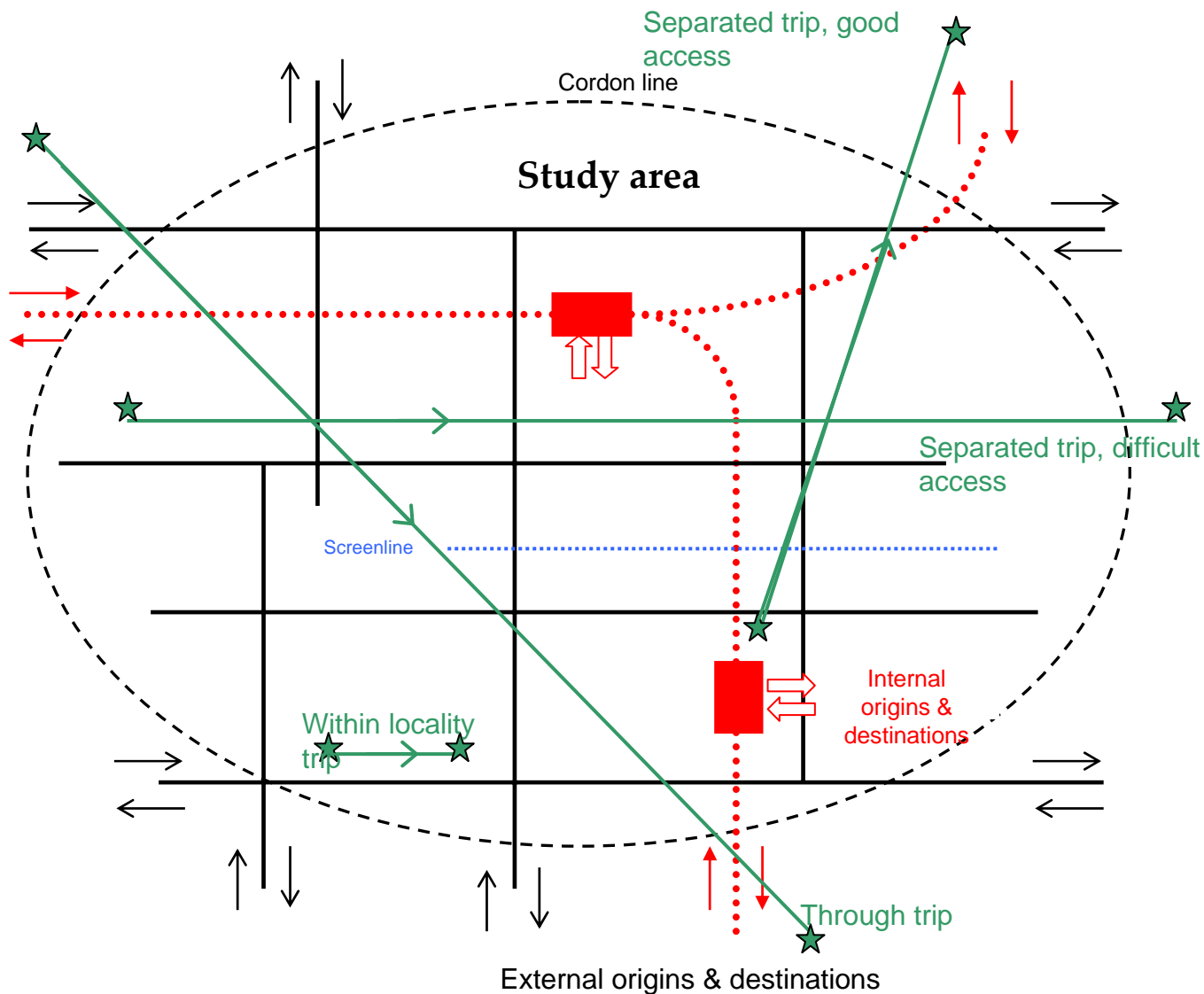
Walk
Bicycle





Market segmentation

- Origin-Destination trip movements





Goals of modern transport planning

- **Sustainability, efficiency and accessibility**
- **i.e. *the triple bottom line (TBL)***
- **Leads to specific objectives, e.g. (from the KonSULT study)**
 - **economic efficiency**
 - **liveability**
 - **environmental protection**
 - **equity, social inclusion and accessibility**
 - **safety and security**
 - **economic development**
 - **finance**





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Conclusions

- Transport planning in Australia has entered a new era – multimodal systems planning
- Contributing to national and regional economic, social and environmental well being
- Triple Bottom Line - sustainability, efficiency and accessibility
- Strategic planning approach required – the BIG picture



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Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
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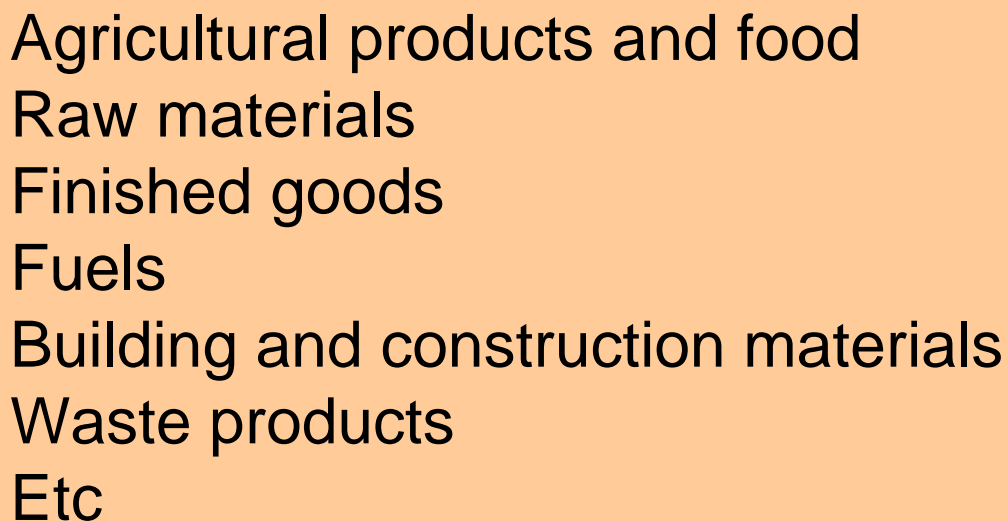




Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
-----------	-----------	--------------	--------------------	----------------



Agricultural products and food
Raw materials
Finished goods
Fuels
Building and construction materials
Waste products
Etc



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Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
-----------	-----------	--------------	--------------------	----------------

Full truck load
Partial truck load
Individual consignment
Container
Bulk solid
Bulk liquid
Etc



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Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
-----------	-----------	--------------	--------------------	----------------

Light commercial vehicle
Rigid truck
Articulated truck
Flat bed rail wagon
Hopper rail wagon
Tanker rail wagon
Double stack rail wagon
Etc



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Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
-----------	-----------	--------------	--------------------	----------------

Local
Suburban
Metropolitan
Regional
Inter-city
Inter-state
International
Etc





Market segmentation

- A classification of freight ...

Commodity	Load type	Vehicle type	Transport distance	Transport mode
-----------	-----------	--------------	--------------------	----------------

Road vehicle
Rail
Pipeline
Air
Water borne
Etc

