
MID WEST STRATEGIC INFRASTRUCTURE FORUM

Wednesday 13 April 2005
Entertainment Centre, Urch Street, Geraldton

WORKSHOP OUTCOMES



Sponsored by:

Mid West Development Commission

Department for **Planning and Infrastructure**

Introduction

The Mid West Strategic Infrastructure Forum was organised by the Mid West Development Commission and the Department for Planning and Infrastructure.

The Forum was held at the Entertainment Centre in Geraldton on 13 April 2005.

Participants included:

<i>Name</i>	<i>Position</i>	<i>Organisation</i>
Mike Howard - Presenter	Chief Operating Officer	Midwest Corporation
Lindsay Reed - Presenter	CEO	Aviva Corporation
Andrew Munckton - Presenter	General Manager Operations	Gindalbie Metals
Robert Vagnoni - Presenter	Managing Director	Murchison Metals Ltd
Kevin Crouch - Presenter	Zone Manager	CBH
Ian Hind - Presenter	Marketing administration Manager	Iluka
Mike Allen - Presenter	State and Regional Policy	DPI
Leigh Mathieson - Presenter	Senior Project Manager	Dept. Industry & Resources
Keith Gordon - Presenter	CEO	Geraldton Port Authority
Paul Larsen - Presenter	Commercial Manager	Westnet rail
Rod Evans - Presenter	Business Development Manager	Alinta
Chris Cox - Presenter	Community Relations Consultant	Western Power
Tim Glennister - Presenter	Regional Manager	Main Roads
Steve Greeve - Presenter	Asset Manager	Water Corporation
Ron Shepherd - Presenter	Regional Manager	Department of Environment
Steve Douglas - Presenter	Acting CEO	MWDC
Gavin Treasure	CEO	Shire of Morawa
Jim Cook	President	Shire of Morawa
Maurice Battilana	CEO	Shire of Chapman Valley
Michael Patience	Operations Manager	Patience Bulk Haulage
Henry Van Der Ende	CEO	Shire of Mingenew
Ivan Wilton	President	Shire of Mingenew
John Sewell	President	Shire of Greenough
Bill Perry	CEO	Shire of Greenough
Vicki Petersen	Mayor	City of Geraldton
Rob Jefferies	CEO	City of Geraldton
Greg Williams	Branch Manager	Giacci Brothers
Sam Giacci	Operations Manager	Giacci Brothers
Craig Kneale	Manager Port Services	Giacci Brothers
David Harley	Managing Director	Gunson Resources
Alan Luscombe	General Manager	Gunson Resources
Steve Jones	Chief Financial Officer	Aviva Corporation
Robert Kirtlan	Director	Aviva Corporation
Trish Palmonari	CEO	Mid West Chamber of Commerce & Industry
George Parker	President	Shire of Northampton
Garry Keeffe	CEO	Shire of Northampton
Murray Connell	Principal Planner	Shire of Northampton
Tom Sotiroff	CEO	MWGACC
Hon Murray Criddle	Legislative Council	Member for the Agriculture Region
Hon Garry Snook	Legislative Assembly	Member for Moore
Steve O'Malley	Shipping Superintendent	Iluka

Nigel Whawell	Principal Transport Specialist	Iluka
Kam Leung	Operations Manager	Iluka
Kevin Ross	General Manager	Magellan
Larry Silvia	Regional Manager	Connell Wagner
Graham Wilks	CEO	Shire of Mullewa
Nino Messina	President	Shire of Mullewa
Tim Freeman	Councillor	Shire of Mullewa
Brenda Heinrich	President	Shire of Carnamah
Dianne Forsyth	Councillor	Shire of Carnamah
Bev Davidson	Liaison Officer	Minister for Mid West
Dilawar Singh	Project Leader	Shire of Perenjori / Prime Solar
Brian Baxter	President	Shire of Perenjori
John Merrick	CEO	Shire of Irwin
Gary Bird	Marketing Manager Western Region	Australian Railroad Group
Paul Anderson	Resource Management Officer	Dept of Environment
Danielle Eyre	Resource Management Officer	Dept of Environment
John Quilty	Landcorp Consultant	Quilty Environment
Bill Headley	Commercial Manager	Geraldton Port Authority
Ken Scully	Operations Manager	Geraldton Port Authority
Peter Duplex	Port Engineer	Geraldton Port Authority
Bruce White	Harbour Master	Geraldton Port Authority
Sue Beswick	Councillor	Shire of Coorow
Matthew Granger	South West Regional Liaison Officer	Chamber of Minerals & Energy
Norman Daffen	Managing Director	Daffen Consulting
Roger Dean	Acting Director Industrial Infrastructure Co ordination	Department Industry & Resources
Amanda Hopkins	Project Officer	Dept. Industry & Resources
Ron Jones	Industry Representative	Port Users Group
Peter Blockley	Director Minerals & Industry	Maunsells
Gary Plowright	Properties Manager	Gindalbie Metals
Tim Langford	Planning & Asset Manager	Main Roads.
Clive Stirling	Manager	Beaufort Shipping Agency WA
Kevin Malaxos	General Manager Operations	Mt Gibson Mining Ltd
Gary Sherry	CEO	Shire of Coorow
Laurie Graham	Chairman	MWDC
Dave Brindal	Deputy Chairman	MWDC
Garry Collins	Board Member	MWDC
Robyn Parsons	Board Member President	MWDC and Shire of Irwin
John Fitzgerald	State Manager	Hughes Environmental Solutions
Shaun Grein	Coordinator of Field Ecology	ATA Environmental
Phil McAuliffe	Project Manager	MWDC
Brendin Flanigan	Project Manager	MWDC
Athol Jamieson	Executive Director Operations	DPI
Tony McCann	Regional Services Manager	DPI
Jerom Hurley	Regional Manager Mid West Planning	DPI
Jane Passarelli	Senior Planning Officer	DPI
Debbie Clifford	Project Officer	DPI
Valma McCrory	Manager Licensing	DPI
Debra Silver	Assistant Regional Coordinator	DPI

The objectives of the Forum were to:

- raise awareness of major proposed projects;
- increase understanding of the existing infrastructure;
- identify infrastructure needs;
- prioritise infrastructure needs and generate options to address those needs.

The focus of the Forum was on the strategic infrastructure requirements over the next 5 – 7 years.



EXECUTIVE SUMMARY

After discussion, participants agreed that should some or all of the proposed resource projects eventuate, the likely scenario for Mid West development is:

- a need to address transport infrastructure that will become pressing in 2006 – 2007; and
- a need to provide extra port capacity in the longer term, given the current export projections.

The key infrastructure needs that are likely to occur in the overall system over the next five years were identified as:

- co-ordination;
- rail upgrades;
- access to water;
- industrial estates;
- road upgrades and connections;
- power for industry;
- upgrade of power SWIS;
- Geraldton Port upgrades; and
- a deep water port (Cape size vessels).

In terms of the next steps, participants agreed that:

- the projects will be driven by industry;
- Government should stay focused on expediting project approvals at the Federal and State levels.
- the Board of the Mid West Development Commission has already approved the establishment of a Mid West Strategic Infrastructure Group;
- the outcomes of this Forum will be provided to that Group for them to examine in more detail and provide advice on the next steps to the Mid West Development Commission;
- the Mid West Development Commission will continue to work closely with the Department for Planning and Infrastructure, the Department of Industry and Resources, other Agencies and industry.

Presentations

Following an overview of Mid West Resource Projects, seven presentations were given on major projects, including significant infrastructure issues.

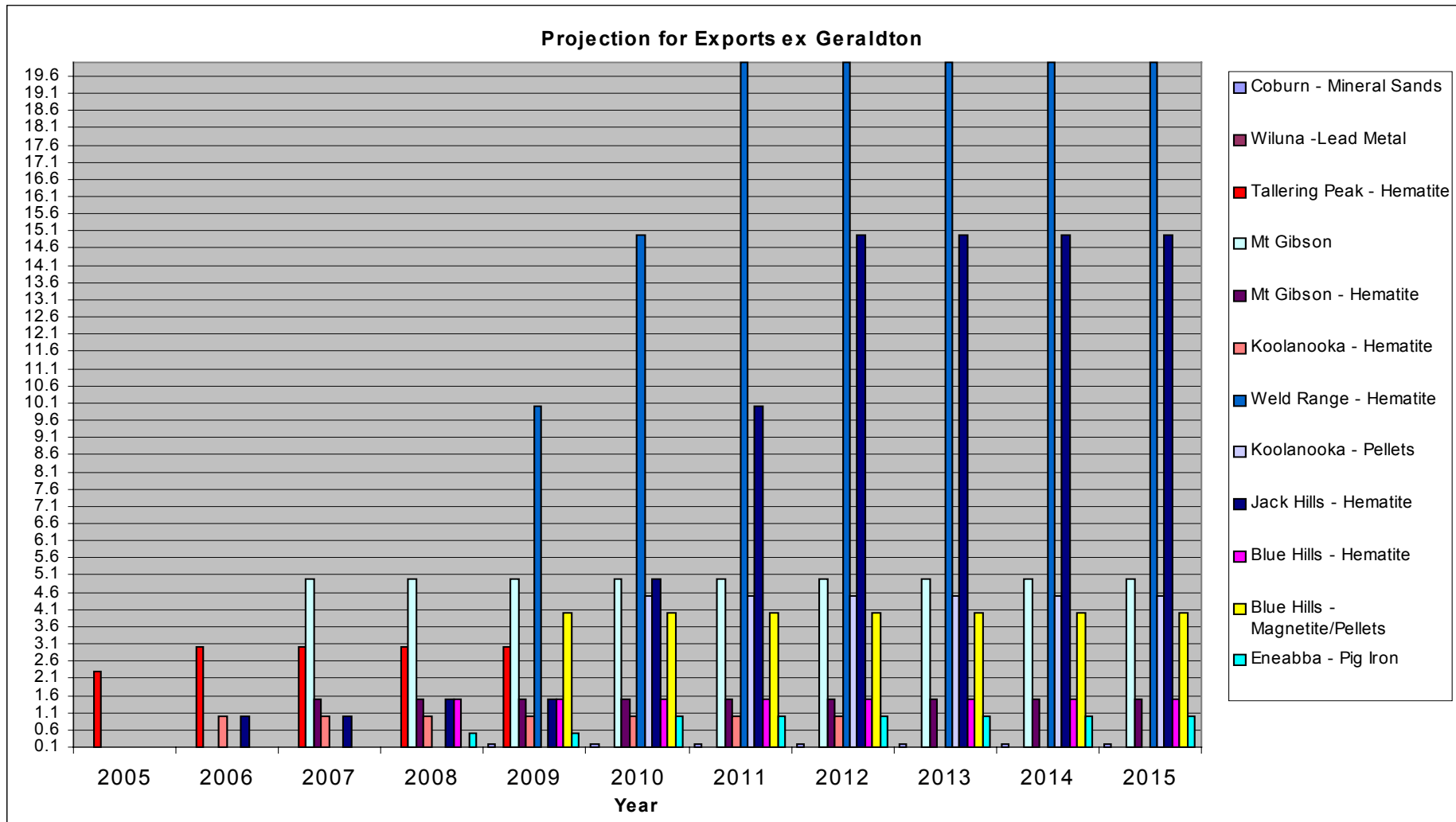
These were followed by nine presentations on current and planned infrastructure.

The agenda for the presentations is attached in Appendix I.



Timeline of Development

From the presentations, the following timeline of development was generated:



Projections for Exports ex Geraldton - All Products			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
			MTPA	MTPA	MTPA	MTPA	MTPA	MTPA	MTPA	MTPA	MTPA	MTPA	MTPA
<u>Company</u>	<u>Location</u>	<u>Product</u>											
Existing GPA exports EXCLUDING Iron Ore (2003/04)			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Gunson Resources	Coburn	Mineral Sands			0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Magellan Metals	Wiluna	Lead Metal			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IRON ORE													
Mt Gibson	Talling Peak	Hematite	2.3	3.0	3.0	3.0	3.0	(Possible Stage 2 to follow)					
Midwest Corp	Koolanooka	Hematite		1.0	1.0	1.0	1.0	1.0	1.0	1.0	(End of known reserves)		
Murchison Metals	Jack Hills	Hematite		1.0	1.0	1.5	1.5	5.0	10.0	15.0	15.0	15.0	15.0
Mt Gibson	Mt Gibson	Magnetite Concentrate			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Mt Gibson	Mt Gibson	Hematite	(Dependant on Rail)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Gindalbie Metals	Blue Hills	Hematite				1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Aviva Corp	Eneabba	Pig Iron	(Estimated start date)				0.5	0.5	1.0	1.0	1.0	1.0	1.0
Midwest Corp	Weld Range	Hematite					10.0	15.0	20.0	20.0	20.0	20.0	20.0
Gindalbie Metals	Blue Hills	Magnetite Concentrate / Pellets					4.0	4.0	7.0	7.0	7.0	7.0	7.0
Midwest Corp	Koolanooka	Pellets						4.5	4.5	4.5	4.5	4.5	4.5
TOTAL			5.8	8.5	15.2	17.7	31.8	42.3	55.3	60.3	59.3	59.3	59.3
NOTE: No allowance made for increases in existing exports such as Grain, Base Metals and Mineral Sands etc													

Individual Projects

From the presentations, the following key features of major projects were highlighted:

- Midwest Corporation:
 - Koolanooka;
 - Hematite;
 - 1.0 MTPA.

Issue:

 - rail capacity.
- Midwest Corporation:
 - Koolanooka ;
 - Magnetite / Pellets;
 - 4.5 MTPA.

Issues:

 - rail?;
 - port?;
 - water?
- Midwest Corporation:
 - Weld Range;
 - Hematite;
 - 10.0 – 20.0 MTPA.

Issues:

 - new rail;
 - deep water port.
- Aviva Corporation:
 - Eneabba;
 - Pig Iron;
 - 0.5 – 1.0 MTPA.

Issue:

 - grid capacity.
- Gindalbie Metals:
 - Blue Hills;
 - Magnetite / Pellets;
 - 4.0 – 7.0 MTPA.

Issues:

 - industrial estate;
 - port?
- Gindalbie Metals:
 - Blue Hills;
 - Hematite;
 - 1.0 – 2.0 MTPA.

Issue:

 - road or rail capacity.
- Murchison Metals:
 - Jack Hills;
 - Hematite;
 - 1.0 – 1.5 MTPA.

Issue:

 - road infrastructure capacity.
- Mt Gibson:
 - Extension Hill;
 - Hematite;
 - 1.5 MTPA.

Issues:

 - rail upgrade;
 - upgrade Mt Gibson – Perenjori Road.
- Mt Gibson:
 - Talling Peak;
 - Hematite;
 - 2.3 – 3.0 MTPA.

Issues:

 - road and rail;
 - 3.0 million tonnes per annum;
 - by January 2006.
- Mt Gibson:
 - Extension Hill;
 - Magnetite;
 - 5.0 MTPA.

Issues:

 - road;
 - rail;
 - slurry;
 - port.
- Magellan Metals:
 - Wiluna;
 - Lead Metal;
 - 100,000 TPA.

Issue:

 - sealing of Wiluna – Meekatharra road.
- Gunson Resources:
 - Coburn;
 - Mineral Sands;
 - 100 – 200,000 MTPA.

Issue:

 - road (Northampton).

Likely Development Scenario

As a reflection on the material presented, participants worked in small groups to generate a succinct description of the most likely scenario.

The common responses were:

- a need to address transport infrastructure that will become pressing in 2006 – 2007; and
- a need to provide extra port capacity in the longer term, given the current export projections.

The individual responses were:

Group One:

- planned production (2005 – 2012) will likely happen, although there may be big delays;
- port congestion likely from 2005 – 2006;
- Oakajee will be essential;
- rail transportation is the primary transport (to port);
- rail capacity can't deliver (to port).

Group Two:

- port capacity:
 - next 12 months do-able;
 - 2006 – Chaos!
- road access:
 - currently being addressed:
- rail:
 - struggling now;
 - not able to cope from 2006.

Group Three:

- increased demurrage;
- no port – no project;
- limitations:
 - road,
 - water,
 - rail.

Group Four:

- a “gridlocked” port (and a threat to regional growth) in two years or less.

Group Five:

- in 2005 – 2006, maximise the existing infrastructure;
- serious needs and issues for 2006 / 07;
- post 2008, need for a new scenario.

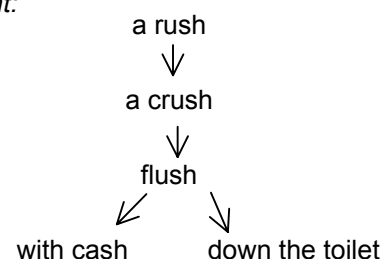
Group Six:

- port overload;
- short term management and infrastructure issues;
- inland capacity is needed to match port capacity;
- urgent need for leadership and decision makers;
- impacts on Geraldton urban population;
- upgrades of existing systems;
- identify need for new rail;
- skilled labour shortages.

Group Seven:

- current and short term is positive and presents infrastructure problems;
- longer term view is optimistic and may not eventuate.

Group Eight:



Show Stoppers:

Participants addressed the following focus question:

What are the top five showstoppers (within our control) other than infrastructure that could affect development?

The most common responses were:

- environmental concerns and approvals;
- lack of coordination between key players;
- availability of skilled labour;
- bureaucratic delays;
- community pressure and social impacts;
- financing and infrastructure funding; and
- lack of political support.

The individual responses were:

Group One:

- EPA policy:
 - land use conflicts (conservation and mining);
 - approvals (specifically vegetation);
- lack of coordinated planning:
 - political support,
 - competitive companies;
- funding and underwriting (and cash flow certainty);
- cost of port;
- Government attitude to private infrastructure.

Group Two:

- do nothing!;
- even slow progress with infrastructure improvements will have severe impacts!;
- lack of Government support for infrastructure development;

– increased adverse pressure from the community, ie: port activity;

– increased environmental pressures.

Group Three:

- bureaucratic delay:
 - environmental,
 - land access,
 - planning approvals;
- environmental issues, social issues and approvals for Geraldton Port.

Group Four:

- labour and skills shortages;
- Native Title;
- environmental approvals;
- community pressure;
- misalignment of parties and desired outcomes.

Group Five:

- social issue:
 - clean port versus dirty port (community acceptance);
- power:
 - network upgrade;
 - gas versus electricity;
- political:
 - funding;
 - approvals;
- financing (private):
 - difficult for the size of companies involved;
- other regions attracting the politicians;
- drilling risk, with no projects drilled substantially as yet.

Group Six:

- price for Iron Ore;
- skilled and unskilled labour shortages;
- associated social infrastructure;
- timely funding;
- timely approvals.

Group Seven:

- paralysis by analysis;
- timeframes and decisions;
- lack of inter-departmental cooperation and cohesion, leading to a lack of project cohesion;
- lack of Government financial commitment;
- market surety.

Group Eight:

- environmental concerns and approvals;
- availability of skilled labour;
- political ineptitude;
- infrastructure funding.

Group Nine:

- failure to coordinate the funding of the strategic issues;
- failure to correctly plan the sequence of infrastructure development.



Participants were asked to address the following focus question:

What are the top 6 – 8 infrastructure needs likely to occur in the overall system over the next five years?

The key infrastructure needs to emerge were:

- co-ordination;
- rail upgrades;
- access to water;
- industrial estates;
- road upgrades and connections;
- power for industry;
- upgrade of power SWIS;
- Geraldton Port (upgrades); and
- a deep water port (Cape size vessels):

These needs arose from a grouping of the following responses:

- **Co-ordination:**
 - planning coordination to bring together the projects and the infrastructure required;
 - meet the existing funding gaps for road to rail and road to port;
 - central coordination for development;
 - identify and commission dedicated infrastructure corridors for rail, road, water and power;
 - Government direction and policy on private port development;
 - Government position on public enterprise borrowing.
- **Rail upgrades:**
 - passing loops and other rail capacity in the hinterland;
 - extension of the rail system to the North East Murchison region;
 - upgrade of rail track from Mullewa to Geraldton;
 - line weight and 16t axle capacity on the Mullewa to Geraldton line;

- extension of rail to Oakajee from the current system;
- rail capacity:
 - upgrade all rail to 19t axle capacity,
 - wagon fleet replaced and upgraded to reflect additional loads,
 - clearly define the operational capacity of each line;
- rail capacity:
 - define base load,
 - triggers for Westnet or other investment,
 - supply of rolling stock,
 - passing loops;
- strategically located heavy rail network in the Mid West, eg: shared network access;
- land transport upgrade:
 - rail loops,
 - axle load increase,
 - encourage rail over road.

➤ **Access to water:**

- suitable water availability with approvals to draw and use that water;
- prove up the Casurina Aquifer;
- energy and water;
- water:
 - industrial:
 - uses and need,
 - mines dewatering,
 - waste water;
 - domestic:
 - long term impacts,
 - provisions.

➤ **Industrial estates:**

- establishment and use of industrial estate in the region, ie: Oakajee, Morawa;
- development of a heavy industrial precinct;
- sufficient road and rail corridors connecting to all major centres.

- **Road upgrades and connections:**
 - road use regardless of state of and increased usage of roads;
 - bringing forward the second stage of the Geraldton Southern Transport Corridor;
 - road from Narngulu to the port as part of the second stage of the Geraldton Southern Transport Corridor;
 - land transport upgrade:
 - rail loops,
 - axle load increase,
 - plan routes east of Mullewa,
 - encourage rail over road,
 - road train route condition,
 - possible upgrade of Mingenew to Morawa road or the Morawa to Mullewa rail for Mid West direct shipped ore.

- **Power for industry:**
 - lack of reliable, consistent power for large consumption;
 - power (energy conversion):
 - base load (secure and stable);
 - alternative energy opportunities.

- **Upgrade of power SWIS:**
 - electrical distribution system upgrades to stabilise SWIS, north of Three Springs;
 - extra generation capacity to electrical distribution system.

- **Geraldton Port upgrades:**
 - two rail discharge facilities at Geraldton Port Authority;
 - maximise existing port:
 - Berth 7 and loader,
 - Berth 6 loader;
 - port-rail enhance;
 - Berth 4 loader upgrade;
 - dedicated iron ore loader berth at Geraldton Port Authority;
 - establishment of second mineral loading facility at Geraldton Port for Panamax;
 - material handling capacity at Berth 4;
 - Geraldton Port Authority (2005 – 2007):
 - development of Berth 7;
 - maximising loading capacity on Berth 4,
 - separate non compatible products.

- increase port capacity:
 - new loader at Berth 4,
 - shed outloading capacity to match Berth 4 loader,
 - rail unloader and conveyors,
 - rationalisation of port land;
- Geraldton Port upgrade:
 - Berth 7 introduction,
 - Larger capacity ship loader,
 - Efficient usage and segregation of 'clean' products and less refined products;
- rationalise port land holdings to increase port capacity;
- Berth 7 as second iron ore berth, in preference to Oakajee.
- replace the port shiploader that is insufficient to handle current capacity;

➤ **Deep Water Port (Cape size vessels):**

- need for a deep water port in conjunction with road and rail upgrade;
- development of Oakajee Port (commitment in 2005!):
 - four years to build;
 - transport access,
 - utilities,
 - vessel size and tonnage = driver;
- development of Oakajee Port facilities to Cape size;
- an accessible deep water port, eg: Cape size shipments;
- port for Cape sized vessels – Oakajee Industrial Estate;
- a deep water port inclusive of all infrastructure including standard gauge rail (now – today!!!);
- development of a deep water port for 2008 / 09;
- sufficient land backed facilities;
- approvals in place.

➤ **Others:**

- development of gas distribution infrastructure near Dongara;
- development of an integrated approach to slurry pipeline construction, with third party facilitation;
- services (water and gas) to Oakajee.

OUTCOME THREE: OPTIONS FOR INFRASTRUCTURE NEEDS

Participants formed groups of interest around each of the major infrastructure needs in order to quantify the issues and generate preferred options to address the needs.

Group One: Geraldton Port Upgrades (1 – 3 years)

- The immediate action is for lobbying activities to determine who pays for the upgrades:
 - user pays?;
 - Infrastructure Fund?
- In the short term, the preferred options are:
 - better management and better communication from GPA and users, in order to protect the urban environment;
 - train unloader to increase the rail capacity;
 - introduction of 24 hour operations for cleaning and loading;
 - shared use of the Grain Berth
 - conduct a Berthing Priority Code Review with user input.
- In the medium term:
 - address dust and environmental issues involved with the introduction of higher capacity shiploaders.
- In the longer term:
 - develop new berths:
 - dedicated iron ore,
 - dedicated mineral sands;
 - obtain land to increase storage capacity.
- The trigger point for expansion is tonnage:
 - less than 10 MTPA of new projects, utilise Geraldton Port;
 - more than 10 MTPA of new projects, develop Oakajee Port.

Forum Comments

Participants provided the following comments:

- social issues may become a threat prior to 10 MTPA;
- issue of 24 hour GPA operations and Southern Transport Corridor resulting in increased noise levels, etc.

Group Two: Rail Upgrades

- In regards to the infrastructure issues, there needs to be:
 - a balance between rail capacity to meet export demands for all users (grain and minerals);
 - rail inloading at the port for iron ore;
 - both network and rolling stock upgrades.
- The most critical action is for the Government to facilitate discussions with users and rail interests regarding rail upgrades and extensions as part of the overall regional infrastructure planning.
- The preferred options are:
 -
 - Perenjori to Morawa line upgrade to 19 tonne axle loads (\$25 million estimated);
 - new line from Morawa to Mingenew (\$60 million estimated);
 - investigate option of upgrading Geraldton to Mullewa line to a standard that allows for future extension to service Weld Range;
 - upgrade Geraldton to Mullewa line to minimum standard;
 - investigate and construct strategic passing loops.

Group Three: Access to Water

- Domestic water consumption will continue to come from Allanoooka and is a secondary issue, due to:
 - relatively small resource demands;
 - relatively small infrastructure costs.
- Industry water use is the primary issue.
- Casuarina is a major option:
 - potential to be a dedicated resource for major industry development, eg: slurry pipeline;
 - green field site with new water providers such as Alinta;
 - needs a short term integrated plan;
 - needs exploratory drilling;
 - major players are Department of Environment, industry and water supply providers.

- East Perenjori Iron Ore Cluster:
 - strategically, the big question is where the water is going to come from;
 - Casuarina has conveyance issues (although a return pipeline associated with the slurry pipeline is an option);
 - East Arrowsmith Basin has conveyance issues (distance), questions of best value for investment returns and issues of social returns (possible increase in supply to towns);
 - new processing technologies using poorer quality water (have companies given adequate consideration?);
 - the best option appears to be the use of dewatered sources:
 - a priority, given potential synergies,
 - conveyance problems (distance),
 - no feasibility evaluations are available.

- Eneabba Precinct:
 - potential synergies between the existing well field and possible power from an iron plant;
 - the positives are:
 - water,
 - possible power,
 - suitable road and rail transport to port,
 - distance from Perth;
 - the negatives are:
 - access to labour force;
 - distance from mineral source and transport corridors;
 - the key factor is that the Eneabba Precinct doesn't need a financial commitment from Government;
 - it does need cooperation between a diverse group of operators;
 - it also requires momentum, arising from vision, commitment and a plan;
 - the key players are Mid West Development Commission, the Shire, Aviva Corporation, Iluka, iron ore companies, Western Power and water service providers.

Group Four: Road Upgrades

- The preferred options for road upgrades are:
 - Geraldton Southern Transport Corridor Stage Two, planned for 2008, (too late?) shifted to 2007 (\$25 million);
 - Mingenew to Morawa to Perenjori widening (\$15 million);
 - Northampton Bypass (\$15 million);
 - Pells Bridge realignment (\$12 million);
 - Greenough River Bridge realignment (\$12 million);
 - Mingenew to Dongara widening (\$3 million);
 - Oakajee infrastructure corridor road (Geraldton Bypass) (\$20 million).
- The implications are:
 - funding of \$170 million for needs over the next 3 – 10 years;
 - planning lead time of 3 – 4 years for a number of projects;
 - competition for funds, with over \$1 billion of significant unfunded road projects in Western Australia;
 - oil price impacts?
- Toll roads will reduce funding requirements.
- Slurry pipeline and rail alternatives will reduce the pressure on roads.

Forum Comments

Participants provided the following comments:

- there is a need to look for ways to take pressure off roads;
- regular maintenance of secondary roads (low relative cost) has potentially significant impacts;
- ask project proponents if project can fund all required infrastructure, as a reality check!

Group Five: Power

- Generation:
 - inadequate;
 - unbalanced (grid losses);
 - fragmented.

- Distribution:
 - no transmission to projects;
 - existing transmission is weak.
- Options:
 - baseload:
 - gas,
 - Oakajee (1,000 MW),
 - Eneabba (200 MW),
 - coal,
 - Eneabba;
 - cogeneration on-site;
 - nuclear;
 - alternatives:
 - wind,
 - solar;
 - upgrade SWIS to 330 kVA;
 - expand SWIS to projects;
 - electrify rail.
- Implications:
 - inefficiencies (individual supplies);
 - risks (environmental).

Forum Comments

Participants provided the following comment:

- potential for coordination, especially if projects have similar timeframes.

Group Six: Industrial Estates

- The industrial estate is needed for high impact industry.
- The options in terms of preference are:
 1. Oakajee;
 2. Eneabba;
 3. Wizard Peak;
 4. Narngulu;
 5. Eradu.

- The implications are:
 - heavy industry requires a deep water port;
 - need 10 MTPA to build a deep water port.
- The positive implications are:
 - would remove the congestion at Geraldton Port;
 - Geraldton won't be a dirty port city;
 - we then have a port that is unconstrained as is industry.

Group Seven: Deep Water Port

- Oakajee is the preferred site.
- Multi-user facility.
- **Urgent issue**
- Four year construction:
 - Geraldton Port at capacity by 2009;
 - timing indicates that some level of private funding is required.
- Detailed design to alleviate swell issues for ship handling and 'berth control'.
- Political commitment is needed.
- User project commitment is needed (Oakajee Business Case).
- Who is the lead Agency (DoIR)?
- Full costings including ancillary services.
- Funding and operational issues to be addressed quickly:
 - public funding?
 - private funding?

Forum Comments

Participants provided the following comments:

- many ore bodies are inferred and this lack of certainty has implications for State commitment;
- timely land access to respective ore bodies is critical;
- Oakajee has a 'Sunset' clause, with some approvals (EPA) lapsing in 2008;
- heavy industry needs a deep water port and a deep water port requires heavy industry.

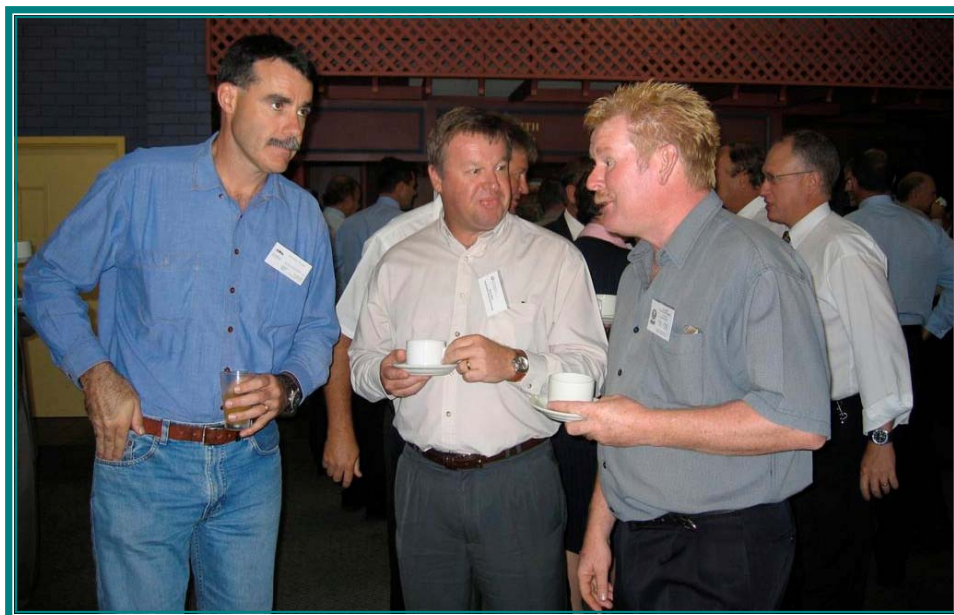
Group Eight: Coordination

- Focus on major regional projects only.
- Establish a Ministerial Policy Decision Group resulting in clear direction from Government.
- Core Government Infrastructure Group with industry representatives (must be a bipartisan approach).
- Streamline approval process to provide surety of approval timeframe.
- Committed sense of urgency.
- Establish a single champion Department that is accountable for coordinating projects.

Forum Comments

Participants provided the following comments:

- there needs to be coordination on:
 - the Government and Agency side;
 - and on the industry side.
- Much has been achieved to date due to strong industry , Government and community partnerships;
- the projects will be driven by industry;
- Government stays focused on expediting project approvals at the Federal and State levels.



CLOSING

Concluding Comments

At the conclusion of the workshop, Steve Douglas as the Acting CEO of the Mid West Development Commission noted that:

- the objectives of sharing information and improving understanding have been achieved;
- the Board of the Mid West Development Commission has already approved the establishment of a Mid West Strategic Infrastructure Group;
- the outcomes of this Forum will be provided to that Group for them to examine in more detail and provide advice on the next steps to the Mid West Development Commission;
- the Mid West Development Commission will continue to work closely with the Department for Planning and Infrastructure, the Department of Industry and Resources, other Agencies and industry.

Participant Reflections

At the conclusion of the Forum, participants were asked to comment on what they would tell a colleague about the Forum.

The responses were:

- Excellent day! Let's not leave it here! So much to do!
- The session was well-attended with a good representation from Government and industry. The Mid West Iron Ore expansion is placing great pressure on the existing infrastructure which currently is in a parlous state. The initiative needs to be strongly supported and not be allowed to languish.
- High prospectively for development of the Mid West region, but there's a lot of issues to be addressed; coordination and logistics are high on the agenda.
- Great awareness day; time for action.
- Very interesting and informative day. Need to get the information into the political arena. Need to do a reality check on the potential projects. But need to be aware of and alert to the potential requirements for the public and private sector to meet the challenges.
- A creative session that "covered the ground" (the challenge now is to make something happen in several areas). Well organised.
- Much needed information of proposed projects for this region.
- Informative and interesting times ahead.
- Informative. Many opportunities for cooperation.
- Very important opportunity to share knowledge.
- Well facilitated, go Debbie.
- Well done Phil McAuliffe.

- Timely. Very worthwhile and well organised. Informative.
- Worthwhile, interesting, lengthy and required.
- \$100 million tonnes per annum by 2010. Real or Blue Sky? \$500 million net needed, who will pay? Why didn't we do this twelve months ago?
- Good opportunity to obtain an overview of proposed developments in the Mid West and the issues facing them.
- Very worthwhile to attend from the point of view that knowledge was shared and also extremely important that the community / social impacts be recognised throughout the process.
- Critical for the development of the Mid West region. Need to take this to the 'next step' without delay!
- Understanding of all the issues associated with projects being proposed helped define the logical solution to the problems.
- Useful to hear some of the detail of all the new projects.
- Very informative.
- Essential and critical forum that must be followed by action.
- Informative, there should be more.
- Informative and thought provoking.
- Informative and interactive; very worthwhile.
- Useful insight into potential projects in the Mid West. A number of potential options for Alinta that are worth pursuing.
- Lots of things happening. There is a willingness to see them successful by the provision of infrastructure, but requires some vision to make the puzzle work.
- A worthwhile sharing of needs and information. "Crikey!".
- The region is set to take off – today's forum was good for MWDC to get its head around it and for coordination to start.
- Oh shit! Cooperation across the entire logistical chain is essential.
- Water is the least of their problems.
- The forum was very informative. Positive for opening communication between industry groups.
- Forum was useful to understand issues, for resource projects and infrastructure.
- Excellent!
- The forum was very informative and worth giving up the day for. Excellent presentations.
- Informative.
- Informative!
- We, the Department of Environment, have got:
 - an image problem; and
 - a lot of work coming our way.
- Future projects; potential.

MID WEST STRATEGIC INFRASTRUCTURE FORUM

WEDNESDAY 13 APRIL 2005
Entertainment Center, Urch Street, Geraldton



Mid West Development Commission
Government of Western Australia

Department for Planning and Infrastructure
Government of Western Australia

8.30 - 8.45**Registration****8.45 - 10.30****Session 1 Project Overviews**

- Introduction - Bevan Bessen (Facilitator)
- Welcome - Laurie Graham - Chairman MWDC - (5 min)
- Outline of Forum Aims - Steve Douglas (MWDC) (5 min)
- Overview of Mid West Resource Projects - Steve Douglas MWDC (15 min)
- Midwest Corporation - Mike Howard - (10 min)
- Aviva Corporation - Lindsay Reed - (10 min)
- Gindalbie Metals - Andrew Munckton - (10 min)
- Murchison Metals - Robert Vagnoni (10 min)
- CBH - Kevin Crouch (10 min)
- Iluka Resources - Ian Hind - (10 min)
- Mt Gibson Iron - Steve Douglas (MWDC) - (10 min)
- Question time - 15 minutes

10.30 - 11.00**Morning Tea****11.00 - 12.35****Session 2 Infrastructure Overviews**

- Department for Planning and Infrastructure (Industrial Estates) - Mike Allen (7.5 min)
- Department of Industry and Resources (Deep-water Port) – Leigh Matheson (7.5 min)
- Geraldton Port Authority - Keith Gordon (10 min)
- Westnet Rail / Australian Railroad Group - Paul Larsen (10 min)
- Alinta Limited - Rod Evans - (10 min)
- Western Power - Chris Cox - (10 min)
- Main Roads - Tim Glenister - (10 min)
- Water Corporation - Steve Greeve - (10 min)
- Department of Environment - Ron Shepherd - (5 min)
- Question time - 15 minutes

12.35 - 1.30**Lunch****1.30 - 2.30****Session 3A Infrastructure Needs**

- Summary of Sessions 1 & 2 - Bevan Bessen (10 min)
- Identification of Infrastructure Needs - Part A (20 min)
- Identification of Infrastructure Needs - Part B (10 min)
- Developing Options (35 min)

2.45 - 3.15**Afternoon Tea****3.15 - 4.30****Session 3B Infrastructure Options**

- Providing Comment on Options (30 min)
- Open Discussion (30 min)
- Summary of the day's outcomes / Ways Forward (15 min)

4.30 - 5.30**Refreshments**