



## Planning and Transport Research Centre

# ANNUAL REVIEW 2009



Department for Planning  
and Infrastructure



The Planning and Transport Research Centre (PATREC) is a collaboration between the four public universities of Western Australia, Curtin University of Technology, Edith Cowan University, Murdoch University and The University of Western Australia. It also receives financial support from the Government of Western Australia (through the Department for Planning and Infrastructure and Main Roads Western Australia).



**PATREC**

**PATREC  
PLANNING AND TRANSPORT RESEARCH CENTRE  
ANNUAL REVIEW 2009**



## *PATREC building on a strategic focus...*

In February, the Board approved the Strategic Plan 2009 - 2010 which expanded the objectives to capacity building across universities, industry and government and beneficially influencing outcomes and value for the State of Western Australia.

In March, the Western Australian Minister for Transport, Hon Simon O'Brien MLC appointed the Executive Director of PATREC to lead a specialist group to develop a long term strategic plan for port development in the Perth metropolitan region. The comprehensive technical and policy report was presented in December.

Two projects, initiated in late 2008 and advanced though the year, were proposals for a Western Australian centre of excellence on road asset research and an alliance of road authorities to develop a long term upgrading, maintenance, management and job skilling program on roads associated with indigenous communities in Northern Australia. Implementation is anticipated in 2010.

PATREC facilitated collaboration between Main Roads Western Australia and Curtin University of Technology resulting in two three-year ARC Linkage Grants for research in real time systems for road network management and hydrated cement treated crushed rock as a road base material for Western Australian roads.

PATREC promoted stronger relationships across the university, industry and government sectors with the continuing international visiting fellows program. Todd Litman conducted two professional short courses and Professor Robert Cervero and Dr Lee Schipper conducted a two day Master Class in conjunction with Dr Reena Tiwari of Curtin University of Technology.

I was delighted that the Patron of PATREC and Governor of Western Australia, His Excellency Dr Ken Michael AC agreed to open the 5<sup>th</sup> Annual PATREC Research Forum in October. The diversity of research presentations and support drawn for across industry, government and the universities was pleasing.

Edith Cowan University's Board membership changed with the retirement of Professor Robert Harvey in December. Robert was a fervent supporter of PATREC and I pay tribute to his commitment and contribution to the Board. I welcome Professor John Finlay-Jones, Deputy Vice-Chancellor Research to the Board.

The Board resolved that in accordance with the principle of rotation of PATREC between partner universities agreed at the establishment of PATREC, and the interest by The University of Western Australia for PATREC for a transfer to UWA, the Chair and Executive Director are discussing administrative arrangements and the research base at UWA. A proposed date for the transfer is 1 January 2011.

I thank the Board members and the PATREC management team for their endeavours in 2009 and am confident 2010 will again be an active year of valued achievements.

Stuart Hicks AO  
Chair  
Planning and Transport Research Centre



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## Attachments

- A PATREC Strategic Plan 2009 - 2010
- B PATREC Business Plan 2009
- C Curtin Corner Program 2009

## PATREC Contacts

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**PLANNING AND TRANSPORT RESEARCH CENTRE**  
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## **Highlights**

### **Board Membership**

- Professor John Finlay-Jones, Deputy Vice-Chancellor Research replaced Professor Robert Harvey, who retired on 17 December 2009, as Edith Cowan University's representative
- The Department for Planning and Infrastructure was abolished and separate Departments of Planning, Transport and Regional Development and Lands were created. Board membership for 2010 is under review

### **Board Decisions**

- University and State agency subscriptions to PATREC for 2009 determined and approved
- Strategic Plan 2009-2010 and Business Plan 2009 approved
- In-principle agreement to transfer PATREC to UWA in January 2011

### **Education and Knowledge Transfer**

- MTS students - 1 dissertation submitted, 1 to complete dissertation, 2 completed a Graduate Certificate, 1 graduated with Post Grad Dip.
- Three International Visiting Fellows conducted a master class and professional short courses
- 5<sup>th</sup> Annual PATREC Research Forum was held at Curtin University of Technology

### **Research Program**

- A 50 year Strategic Plan for future port development in the Perth Metropolitan area for the Hon. Minister for Transport was completed
- Commencement of operations of the Curtin Monash Universities Accident Research Centre (C-MARC)
- Two successful ARC Linkage Grants (Curtin-DEBII \$314,192: Curtin-PRG \$90,000)

## Collaborative Activities

- Representation on University Research Centre Advisory Boards
- Centre of Excellence in Pavement Asset Research
- Northern Alliance for Roads Associated with Indigenous Communities

## Finance

- The cash balance in PATREC as at 31 December 2009 was **\$184,898**

## Business Plan - Key Performance Indicators

- Strategic Plan for Metropolitan Port Development
- Two ARC Linkage Grants
- Three International Visiting Fellows
- 5th Annual Research Forum
- Board appointments
- Budget management

## Governance

### Board

At 31 December 2009 PATREC's Board comprised the following members:

Adj Prof Stuart Hicks AO	Independent Chairman
Prof Linda Kristjanson	Representing Curtin University of Technology
Prof John Finlay-Jones	Representing Edith Cowan University
Prof David Harries	Representing Murdoch University
Mr Tim Shanahan	Representing The University of Western Australia
Mr Eric Lumsden PSM	Representing Department of Planning
Mr Menno Henneveld	Representing Main Roads Western Australia

**Adjunct Professor Stuart Hicks AO, BEc, FAIM, FCILT, FAICD, MIMC** is also Chairman of the East Perth Redevelopment Authority and Chairman of the John Curtin Institute for Public Policy at Curtin University of Technology. He is a former Chairman of the National Transport Commission and former Director General of Transport in Western Australia. Stuart holds separate appointments as Adjunct Professor at Curtin University of Technology, Edith Cowan University, Murdoch University and The University of Western Australia

**Professor Linda Kristjanson** RN, BN, MN, PhD is Deputy Vice Chancellor, Research and Development at Curtin University of Technology.

**Professor John Finlay-Jones** BSc(Hons), PhD, FASM, is Deputy Vice-Chancellor Research at Edith Cowan University. He replaced **Professor Robert Harvey** BEd (Hons), MBA is Executive Dean in the Faculty of Business and Law and Pro Vice Chancellor, Equity & Indigenous who retired on 17 December 2009.

**Professor David Harries** Ph.D, M.Env.Stud, Dip.Ed, B.Sc is the Director of RISE, Faculty of Minerals and Energy Research, Research Institute for Sustainable Energy at Murdoch University.

**Mr Tim Shanahan** LLB, PSM is the Director of the Energy and Minerals Initiative at The University of Western Australia.

**Mr Eric Lumsden** PSM, MBA, LifeFPIA, FLGMA, FAIM is the Director General of the Department of Planning, Western Australia

**Mr Menno Henneveld** BE, PGDiplAdmin, FIEAust, FAICD, MCILT is the Commissioner of Main Roads Western Australia and Acting Director General of the Department of Transport

## **Management Team**

Professor Greg Martin PSM is the Executive Director and Ms Tania Carter is the Business Manager for PATREC. Ms Carter completed the 10 month Frontline Management Program and Major Project in 2009.

## **PATREC Memorandum of Understanding**

The four participating universities have approved the PATREC MOU to 31 December 2012.

## **Board Meetings and Decisions**

The Board met on 26 February, 18 June and 15 October 2009.

### **PATREC Strategic Plan 2009 - 2010**

The Board approved the Strategic Plan which highlighted the dual purposes to *Build Capacity in Planning and Transport* and *Beneficially Influence Strategic State Objectives*. The Strategic Plan 2009 - 2010 - See Attachment A

### **PATREC Business Plan 2009**

The Board approved the Business Plan which listed actions for 2009 and key performance indicators. Business Plan 2009 - See Attachment B.

## Financial Contributions

The universities and government agencies' financial contributions for 2009 were:

• Curtin University of Technology	\$ 80,000
• Edith Cowan University	\$ 20,000
• Murdoch University	\$ 20,000
• The University of Western Australia	\$ 80,000
• Department for Planning and Infrastructure	\$140,000
• Main Roads Western Australia	\$100,000

## PATREC Transfer to UWA

UWA Board Member, Tim Shanahan has expressed the interest of The University of Western Australia in PATREC transferring from Curtin University of Technology.

The rotation of PATREC through the partner universities was a foundation principle for the establishment of PATREC.

PATREC was housed at Murdoch University from 2002 to March 2005 and has been at Curtin University of Technology to the present time.

## The Board

- acknowledged the rotation policy for the location of PATREC
- affirmed the interest expressed by The University of Western Australia for PATREC to be located on their campus
- gave in-principle agreement to the rotation to UWA and instructed the Chair and Executive Director to discuss the move with attention to necessary administrative arrangements and the solidness of the research base at UWA, and
- agreed that a date for the transfer could be 1 January 2011.

The Board has agreed to hold four meetings in 2010.

## Meeting With His Excellency, the Governor of Western Australia

Chair, Stuart Hicks and Executive Director, Greg Martin met with PATREC's Patron His Excellency Dr Ken Michael AC on 6 May 2009 to update the Governor on the activities of PATREC. Copies of the 2008 Annual Review, Strategic Plan 2009-2010 and Business Plan 2009 were presented. The

Governor confirmed his interest and continuing support. The Governor agreed to open the 5<sup>th</sup> Annual PATREC Research Forum.

## Academic and Research Staff/Students

Professor Elizabeth Chang	Director, Digital Ecosystems and Business Intelligence Institute	Curtin University of Technology
Dr Trudi Cooper	Lecturer, School of Community Services, Education and Social Sciences	Edith Cowan University
Dr Carey Curtis	Professor of Urban and Regional Planning	Curtin University of Technology
Professor Tharam Dillon	Research Fellow, Digital Ecosystems and Business Intelligence Institute	Curtin University of Technology
Dr Fred Affleck	Adjunct Professor	Curtin University of Technology
Dr Mike Dockery	Research Associate, Economics and Finance	Curtin Business School
Dr Lance Fung	Associate Professor, School of Information Technology	Murdoch University
Dr Hamid Nikraz	Professor of Civil Engineering, School of Civil & Mechanical Engineering	Curtin University of Technology
John Georgiades	Adjunct Associate Lecturer, Faculty of Business and Law	Edith Cowan University
Dr Peerapong Jitsangiam	Lecturer, School of Civil & Mechanical Engineering	Curtin University of Technology
Professor Billie Giles-Corti	Director, Centre for Built Environment and Health	The University of Western Australia
Professor David Harries	Director of RISE, Faculty of Minerals and Energy Research, Institute for Sustainable Energy	Murdoch University
Dr Laurence Hartley	Associate Professor, Faculty of Health Sciences, School of Psychology	Murdoch University
Izumi Hart	PhD candidate, School of Psychology	Murdoch University
Delia Hendrie	Lecturer, School of Public Health	Curtin University of Technology
Dr Harry Bloch	Professor of Economics, School of Economics & Finance	Curtin University of Technology
Dr Farookh Hussain	Research Fellow, Digital Ecosystems and Business Intelligence Institute	Curtin University of Technology
Ngoc Quang La	PhD Student, School of Public Health	Curtin University of Technology
Dr Peter Lawrence	Adjunct Associate Professor, Faculty of Business & Law	Edith Cowan University
Dr Terry Love	Research Fellow, School of Engineering	Edith Cowan University
Dr Bobbie Oliver	Associate Professor, Department of Social Sciences, School of Social Sciences & Asian Languages	Curtin University of Technology
Anusha Mahendran	Research Associate, Economics & Finance	Curtin Business School
Dr Fiona McKenzie	Director, Housing and Urban Research Institute of WA	Curtin University of Technology
Dr Lynn Meuleners	Senior Research Fellow, Public Health	Curtin University of Technology
Dr Peter Newman	Professor of Sustainability	Curtin University of Technology
Dr Doina Olaru	Lecturer, Information Management and Transport	The University of Western Australia
Dr Terri Pikora	Former DPI Research Fellow in Marine Safety, Injury Research Centre	The University of Western Australia

Dr Roger Thompson	Professor, Dept of Mining Engineering	West Australian School of Mines
Dr Vidyasagar Potdar	Research Fellow, Digital Ecosystems and Business Intelligence Institute	Curtin Business School
Dr Min Qiu	Senior Lecturer, Information Management and Transport	The University of Western Australia
John Smoker	PhD candidate, Curtin University Sustainability Policy Institute	Curtin University of Technology
Yu Chao Sun	PhD candidate, Information Management and Transport	The University of Western Australia
Dr John Taplin AM	Professor of Information Management and Transport	The University of Western Australia
Dr Reena Tiwari	Senior Lecturer, School of Architecture and Construction	Curtin University of Technology
Dr Malcolm Tull	Associate Professor of Economics	Murdoch University
Nick Wills-Johnson	ARG Research Fellow in Railway Competition Policy	Curtin University of Technology
Clare Yu	PhD candidate, Information Management and Transport	The University of Western Australia
John Smoker	PhD candidate, Curtin University Sustainability Policy Institute	Curtin University of Technology
J Wang	PhD candidate, Information Management and Transport	The University of Western Australia

## Education and Knowledge Transfer

### Master of Transport Studies

#### Student Completions Status

- 1 Dissertation to complete
- 1 Dissertation to submit in 2010
- 2 Completed with a Grad Dip
- 1 Completed with Post Grad Dip

### International Visiting Fellows Program

**Todd Litman**, Victoria Transport Policy institute, BC Canada - 25 to 31 March 2009

(Mr Litman's visit to Perth was sponsored by DPI, PTA, LandCorp and the City of Perth)

**Professor Robert Cervero**, UC Berkeley and **Dr Lee Schipper**, Stanford - 17 to 21 August 2009

(Visit proposed by Dr Reena Tiwari was arranged and coordinated by PATREC - included meetings with Hon John Day MLA and Hon Alannah MacTiernan.)

## Professional Short Courses

The following courses were offered:

- 26 March 2009                    *Parking Management: Best Practices* (Managing solutions to parking problems) - Todd Litman, Victoria Transport Policy Institute
- 30 March 2009                    *Multi-modal Evaluation* (Evaluating mobility management strategies) - Todd Litman
- 18 - 19 August 2009            *Master Class, Cities Green or Red - transport and urban design in the context of Climate Change: Are we getting the message?* - Prof Robert Cervero, Dr Lee Schipper with Dr Reena Tiwari (Curtin University of Technology)  
(PATREC, DoP and PTA provided funding and in kind support for the Master Class)

## Public Lectures

- 27 March 2009                    *Healthy Community Planning - Best Practices* - Todd Litman

## PATREC Connection Breakfast/Lunches

Connection events were hosted by PATREC for researchers, students, funding partners and collaborators to engage in research and policy based discussion and networking.

- 31 March                            *Comprehensive Evaluation of Rail Transit Benefits* - Todd Litman, VTPI, BC Canada
- 20 August                           *Urban Sustainability and transport, why business as usual won't do it!* - Prof Robert Cervero, UCB and Dr Lee Schipper, Stanford
- 26 November                      *How well are we doing? Nationally? And in the West?* - Michael Deegan, Infrastructure Coordinator, infrastructure Australia (convened in conjunction with CILTA)
- 1 December                        *Towards a Sustainable Railway - A UK perspective with a world view* - Bob Docherty, International Business specialist, UK Trade and Investment

## Fifth Annual PATREC Research Forum 2009

The Fifth Annual PATREC Research Forum was held at Curtin University of Technology on 1 October 2009.

8:00- 8:05	<b>Welcome &amp; Introduce Governor Prof Greg Martin PSM, Executive Director, PATREC</b>	
8:05- 8:15	<b>Opening His Excellency Dr Kenneth Michael AC</b>	
8:20 – 8:50	<b>Keynote Presentation: Future Port Developments</b> <i>Stephen Bradford, Chief Executive Officer, Port of Melbourne</i>	
9:00 – 9:30	Ownership Models of Port and Rail Facilities <i>Ted Williams, Rail Transport Industry</i>	
9:30 – 10:00	Writing the Union: History Lessons for Transport Planners? <i>Dr Bobbie Oliver, School of Social Sciences and Asian Languages, Curtin University</i>	
10:00 – 10:30	Graffiti artists and their relation with the railway system <i>Dr Michaela Evans, Discipline of Anthropology and Sociology, University of Western Australia</i>	
10:30 – 11:00	<b>Morning Tea</b>	
11:00 - 11:30	Voluntary travel behaviour change toward sustainable travel in Perth – what works? <i>Amy Thom, TravelSmart Workplace, Department of Environment and Conservation</i>	Sustainability Assessment of Hydrated Cement Treated Crushed Rock Base (HCTCRB) <i>Y. S Yeo, P. Jitsangiam and H.R Nikraz, Department of Civil Engineering, Curtin University</i>
11:30 – 12:00	Electric Vehicles and their policy implications for Vehicle to Grid Technology <i>Andrew Went</i>	Ultra-heavy Axle Loads: Design and Management Strategies for Mine Pavements <i>Roger Thompson, West Australian School of Mines, Curtin University</i>
12:00 – 12:45	<b>Lunch</b>	
12:45 – 1:15	A successful TOD will reinforce both the community and the Transit System? <i>Ghassan Daban, Transport Planner, University of Western Australia</i>	Trends in Urban Form and Travel Behaviour: What's Old is New Again. <i>Heidi Lansdell, Cardno</i>
1:15 – 1:45	The Role of Parking Policy in the Urban Transport System <i>Steve Beyer, Public Transport Authority</i>	A Critical Examination of Projections of a Housing Shortage in Australia <i>Andrew Wilkinson, Department of Treasury and Finance Government of Western Australia</i>
1:50 – 2:00	<b>Summary &amp; Conclusion</b>	
2:00 – 3:00	<b>Refreshments and Prize Award</b>	

The C Y O'Connor Prize for the best paper was presented to Dr Roger Thompson from the Department of Mining at the WA School of Mines.

*Associated papers are available at*



[http://www.patrec.org/forum/2009/research\\_forum\\_2009.aspx](http://www.patrec.org/forum/2009/research_forum_2009.aspx)

## **Curtin Corner**

PATREC and the John Curtin Institute of Public Policy jointly sponsored a weekly guest presentation and discussion group throughout 2009. Curtin Corner Program 2009 - See Attachment C.

## **PATREC Research Program**

### **Research Supervision**

The Executive Director, Professor Greg Martin has been registered as a Level 1 supervisor of Doctoral and Masters Students at Curtin University of Technology

### **Fellowships and Scholarships**

Dr Terri Pikora PhD (UWA), MPH (UWA), BHSc (Health Promotion)(ECU), AssDipAppSc (Library Media)(ECU). Dr Pikora is Marine Safety Research Fellow employed by the University of Western Australia in the Injury Research Centre (School of Population Health). Dr Pikora completed her contract on 12 November 2009. This fellowship was fully funded by the Department for Planning and Infrastructure to support its marine safety programs. Her final projects were the linked data project and the wet and wild project.

PATREC has offered through Dr David Breen, Director of Health Services Research at The University of Western Australia two (2) Honours/Masters Scholarships at \$2,000.00 for students undertaking research into marine safety.

Nick Wills-Johnson BEc(Hons)(UWA) is Research Fellow in the Centre for Research in Applied Economics at Curtin University of Technology. His research is being funded by Rio Tinto Iron Ore, the Department of Industry and Resources, WestNet Rail and the Australian Railroad Group Ltd up to March 2010. Nick is completing a PhD examining the impact of antitrust regulation in Australia.

### **Doctoral Studies**

The Executive Director is associated with the supervision of each of the following PhD students.

Dr La Ngoc Quang has a Curtin funded place as a PhD candidate in the School of Public Health and has a three year stipend funded by PATREC (ending August 2010). The research will profile the mortality and morbidity

of injuries among bus and taxi drivers, and investigate their risk factors for road crashes in Hanoi, Vietnam. Due to difficulties in obtaining survey data, Quang's program was placed on hold and recommenced in September.

**John Smoker** has a three year PATREC scholarship and support funding from Main Roads Western Australia (ending July 2009) to examine the past, present and future funding arrangements and management processes for maintaining access roads, and engagement and inclusion of remote indigenous people in governing and planning for long term viability of their communities. The thesis is expected to be completed in March 2010.

**Ms Izumi Hart** is a PhD Student at Murdoch University and is investigating the measurement of safety perception and safety culture of the Australian rail industry. She anticipates completing in 2010.

## Collaborating Research Organisations

PATREC research collaborators
City Planning & Sustainability, Murdoch University
Curtin Business School
Faculty of Business and Law, Edith Cowan University
Faculty of Community Services, Education and Social Services, Edith Cowan University
Faculty of Law & Business, Murdoch University
Housing and Urban Research Institute of WA, Curtin University of Technology
Information Management and Transport, The University of Western Australia
Institute for Sustainability and Technology Policy, Murdoch University
Murdoch Business School
Research Institute for Sustainable Energy, Murdoch University
School of Economics and Commerce, The University of Western Australia Business School
School of Engineering, Edith Cowan University
School of Population Health, The University of Western Australia
School of Psychology, Murdoch University
School of Public Health, Curtin University of Technology
School of Urban & Regional Planning, Curtin University of Technology

## Research Partners

PATREC research funding partners
Australasian Railway Association Inc
Australian Railroad Group Pty Ltd
Australian Research Council
City of Cockburn
City of Gosnells
City of Joondalup
City of Melville
City of Perth
City of Rockingham
City of Swan

CRC for Rail Technology
Department of Planning (WA)
Department of Transport (WA)
Department of Housing and Works (WA)
East Perth Redevelopment Authority
Fremantle Ports
LandCorp (Western Australian Land Commission)
Main Roads WA
Midland Redevelopment Authority
Office of Road Safety WA
Office Crime Prevention WA
Public Transport Authority (WA)
QR (Queensland Rail)
Western Australian Planning Commission

## Research Projects

**Curtin - Monash Universities Accident Research Centre (C-MARC):** The funding agreement with the State Government and collaboration agreement with Monash University were signed on 9 December 2008. PATREC was reimbursed for its costs in facilitating establishment of the Centre.

The first meeting of the Board was held on 13 May 2009. The Centre was officially launched on 17 July 2009.

The Executive Director of PATREC is to be a member of the C-MARC Board.

**Road Safety Senior Research Fellowship:** Main Roads WA has funded a Senior Research Fellow in Road Safety, Dr Lynn Meuleners, to conduct a program of research in the Curtin University School of Public Health for a term of three years to March 2010.

**CREST (Centre for Research into Energy Sustainable Transport):** This Curtin and Murdoch based program was awarded a substantial WA State Centre of Excellence grant. PATREC is a member of the Research Advisory Group.

**Optimising Urban Design for TOD:** PhD candidate Yu-Chao Sun research in the UWA School of Economics and Commerce is to develop a genetic algorithm for urban layout design and optimisation. Yu-Chao was awarded the 'Village at Wellard Scholarship', which is an APAI stipend from PATREC's ARC project, Impacts of Transit-Led Development in a New Rail Corridor.

**Parking policy with special reference to TOD precincts:** PhD student Ghassan Daban in the UWA School of Economics and Commerce is examining parking policies with a specific focus on its optimisation in TOD precincts.

**Impacts of Transit Led Development in a New Rail Corridor:** This research, being conducted over five years (2005-2009) under an ARC Linkage Grant, is assessing impacts of transit-oriented development (TOD) in

precincts adjoining the new Perth - Mandurah passenger railway. A detailed briefing on the research was presented to representatives of the project partners at UWA on 16 September 2009. In accordance with the requirements of the Grant, a forum will be arranged by PATREC early in 2010 to disseminate the results of the research.

**Planning and Transport Modelling Program:** This program, which is to include a freight network model for Perth, commenced in mid-2005 and has progressed slowly. The expenditure has been re-programmed and a research assistant appointed to progress the project which is now expected to be completed in 2010.

**Safety in the Heavy Vehicle Industry:** This research is to determine the direction and size of associations between key risk factors and heavy vehicle crashes in Western Australia. The study is being undertaken by Dr Lynn Meuleners in conjunction and concurrently with the population based case-control study of heavy vehicles currently in operation in New South Wales (NSW) and Queensland (QLD) over a three year period. The Western Australian component, funded by Main Roads Western Australia, will benefit by drawing on the University of Sydney team which is funded by an ARC Linkage Grant to conduct the study in New South Wales and Queensland.

**Licensing Business Intelligence Project:** A collaboration proposal to enhance data quality and business intelligence and processes has been submitted to the Department of Transport (formerly Department for Planning and Infrastructure) by PATREC and Curtin's DEBI Institute. A second ARC Linkage Grant application was submitted in October to fund this project over three years. PATREC will supply in-kind support.

A separate project for data cleansing, in anticipation of an ARC Linkage grant, has been initiated with DoT.

**Real Time Systems for Road Network Management:** PATREC submitted a collaboration proposal on behalf of Curtin's DEBI Institute to Main Roads Western Australia to apply data mining techniques and real time data analysis to apply intelligence to road traffic monitoring and control. A DEBI ARC Linkage Grant application was successful and received a grant of \$314,192 to fund this project over three years. MRWA will provide cash funding of \$90,000 and an in-kind contribution of \$300,000. PATREC will supply in-kind support.

**Centre of Excellence in Road Pavement Asset Management:** Workshop discussions between PATREC, MRWA, ARRB, UWA and Curtin University of Technology leading to a feasibility study and business case have proceeded and are expected to be finalised in early 2010. The proposal is for a Western Australian centre of excellence for research into road pavement condition and road infrastructure asset management.

**Performance, Evaluation and Enhancement of Hydrated Cement treated Crushed Rock base as a Road Base Material for Western Australian Roads:** PATREC facilitated a successful ARC Linkage grant

submission by Curtin University of Technology with Main Roads Western Australia industry support. The three year grant is for \$90,000.

**Yield Management in a Regulated Regional Airline:** PATREC facilitated a meeting of Associate Professor Min Qiu, PhD student Ms J Wang and Skywest Airlines to establish an industry data source and engagement in support of Ms Wang's research program.

**The Samson Family History Project:** PATREC has agreed to provide a \$3000 seed funding grant to Associate Professor Bobbie Oliver to develop an ARC Linkage Grant submission to research the history of the Samson Family. The family company incorporates the longest established private transport and logistics company in Australia.

## **Collaborative Activities**

### **Fremantle Ports Optimum Planning Group**

On 5 March 2009, the Minister for Transport, Hon Simon O'Brien MLA appointed the Executive Director, Greg Martin to chair the Optimum Planning Group, charged with developing a long term strategic plan for port development in the Perth Metropolitan Region. The previous Executive Director of PATREC, Adjunct Professor Fred Affleck and the Director General of the Department for Planning and Infrastructure, Eric Lumsden were appointed to the Group. The Group presented their report to the Minister on 15 December 2009. The Executive Director fees were being credited to PATREC.

### **John Curtin Institute of Public Policy**

The Executive Director participated in the public policy short courses conducted for the Department for Planning and Infrastructure, later comprising staff from the Departments of Planning and Transport, DTF and for Curtin MPA students.

### **UWA Centre for Built Environment and Health**

The Executive Director chairs the Capacity Building Grant meeting of researchers in the Centre and provides guidance on sponsorship opportunities and research program applications. The Executive Director made representation to NHMRC on the partnership centres of research excellence program.

### **UWA PATREC Research Seminar**

A PATREC Research Seminar was arranged by UWA on Monday, 7 September to explore opportunities for collaboration with PATREC in developing research proposals.

### **TOD Coordinating Committee**

The Executive Director is a member of the inter-agency coordination committee guiding development of policy and practice in transit oriented development in the Perth metropolitan area.

### **Perth Waterfront Project Transport Reference Group**

The Executive Director is a member of the inter-agency reference group advising on transport issues and solutions for this major government city building initiative.

### **Centre for Research into Energy for Sustainable Transport**

The Executive Director is a member of the CREST Research Advisory Group.

### **Digital Ecosystems and Business Intelligence Institute**

The Executive Director is a member of the Advisory Board of DEBII, in the Curtin Business School.

### **Curtin Graduate School of Business**

The Executive Director is a member of the Advisory Board.

### **Curtin - Monash Universities Accident Research Centre**

The Executive Director is a member of the Board of Management.

## **Other Activities**

### **Senate Rural and Regional Affairs and Transport Committee**

The Executive Director gave evidence to the Committee for their Inquiry into Public Transport on 23 March. The PATREC report for the Public Transport Authority of Western Australia entitled, *Future Directions - Planning for the Next Decade of Public Transport in Perth* was referenced.

**The Northern Alliance for Roads Associated with Indigenous Communities**  
Arising from PhD student John Smoker's field work and the need to advance more effective and stable long term governance arrangements for planning, funding and delivering roads to remote communities in Northern Australia, PATREC (Greg Martin), CUSP (Peter Newman) and Main Roads Western Australia (David Brown) convened a conference in Kununurra on 25 November 2008. Representatives from Queensland, Northern Territory and Western Australia attended - including state and territory road authorities, local government, indigenous communities/organizations.

The three-jurisdiction Northern Alliance (WA, NT and Qld) submitted a proposal to Infrastructure Australia for consideration under the Building Australia Fund. A meeting of the Northern Roads Alliance was held in Mt Isa on 28 April 2009 and determined that the initiative focus on the Closing the Gap agenda and presentation through First Ministers for discussion at COAG.

## Specialised Road Research Services

PATREC joined with ARRB and was successful in award of the Provision of Specialised Road Research Services Contract to Main Roads Western Australia. ARRB's capacity to undertake operational and tactical research projects combined with PATREC's capacity in specialist strategic research will enable PATREC and ARRB to positively influence the transport research agenda and outcomes in Western Australia. An example is the preparation of a feasibility study to establish the centre of excellence in pavement asset research.

## Conference Organising Committees/Peer Reviewer

- Australian Transport Research Forum, Auckland, October 2009
- MainStreet "Rediscovering the Heart", Fremantle, 15 - 19 March 2009
- State of Australian Cities Conference, Perth, 24 - 27 November 2009

## Australian Transport Research Forum (ATRF)

PATREC provides a complete register of all papers presented at ATRF Conferences and notices of forward conferences on its website.

## Presentations

The Executive Director made the following presentations during 2009:

Date	Forum/Title	Sponsor
29 January 09	Discussion Leader - South West Region Infrastructure Workshop	South West Region Group
12 March 09	Address - "Celebrating Success"	IPWEA Conference
23 March 09	Witness - Inquiry into Public Transport	Senate Rural and Regional Affairs and Transport Committee
6&7 April 09	Presentation - "Introduction to Public Policy - Implementation Case Studies"	JCIPP-PATREC for DPI
8 April 09	Address - "Perth's Sustainable Transport Future"	ScienceNetwork Forum
22 April 09	Keynote Address - "NTC - Delivering Reform"	ATA National Convention
23 April 09	Presentation - "A practitioner's personal perspective"	Curtin Seminar - Managing in the Public Sector 500
June 09	Role of Intermodal Terminals	DPI Intermodal Workshop
8 September 09	Chair - "WA Transport Infrastructure Summit 2009"	Lloyd's List DCN
16 November 09	Panelist - "Targeting the speed limits?"	Engineers Australia and Institute of Transportation Engineers
30 November 09	Lecture - "Progressive Development of Practice in Planning"	Murdoch University, Law 3006, The Law of Planning
7&8 December 09	Presentation - "Introduction to Public Policy - Implementation Case Studies"	JCIPP-PATREC for DoP, DoT

## **Other Appointments**

### **National Transport Commission**

Executive Director, Greg Martin was appointed as Chairman of the Commission by the Commonwealth Minister for Infrastructure, Transport, Regional Development and Local Government on 4 September 2008.

### **Western Australian Freight and Logistics Council**

Executive Director, Greg Martin was appointed to the Council by the Minister for Transport on 12 March 2009.

PATREC facilitated the Council engaging Dr Flavio Gazzani at Murdoch University to undertake a literature review of impact of dredging on the marine environment. The report has been completed.

### **Taxi Industry Board**

Executive Director, Greg Martin was appointed as Deputy Chair of the Board by the Minister for Transport on 14 May 2009.

## **Business Plan 2009**

### **Key Performance Indicators:**

Number of projects and assessed value to stakeholders  
(Consistent with the PATREC Strategic Plan 2009-2010)

- Long Term Strategic Plan For Port Development in the Perth Metropolitan Region - complete
- Western Australian Pavement Asset Research Centre - proposal
- Business Intelligence Project for Vehicle and Driver Licensing - in process
- Real Time Systems for Road Network Management - in process
- Indigenous Community Access Roads - proposal

Sponsorship and fee revenue generated

- PATREC Partner funding
- ARC Linkage Grants - DEBII and Curtin-PRG
- Projects - Fremantle Ports Planning Group
- Activities - JCIPP



Number of conferences, forums, workshops and seminars

- International Visiting Fellows Program 2009
- Master Class - students and practitioners
- Professional short courses
- PATREC Connection events

Satisfaction of Board (shareholders) and stakeholders

- Board resolutions
- Funding commitments for 2010
- PATREC Annual Research Forum

Reputation of PATREC as facilitator and/or contributor on public policy

- ARC Linkage Grants
- C-MARC fees
- ED appointments - projects, boards

Financial viability and management of PATREC

- Annual Business Plan and Budget
- Year end retained earnings
- Financial Audit
- Three Board meetings in 2009
- PATREC Website reviewed/refurbished

## Attachments

- A PATREC Strategic Plan 2009 - 2010
- B PATREC Business Plan 2009
- C Curtin Corner Program 2009

Annual Review 2009

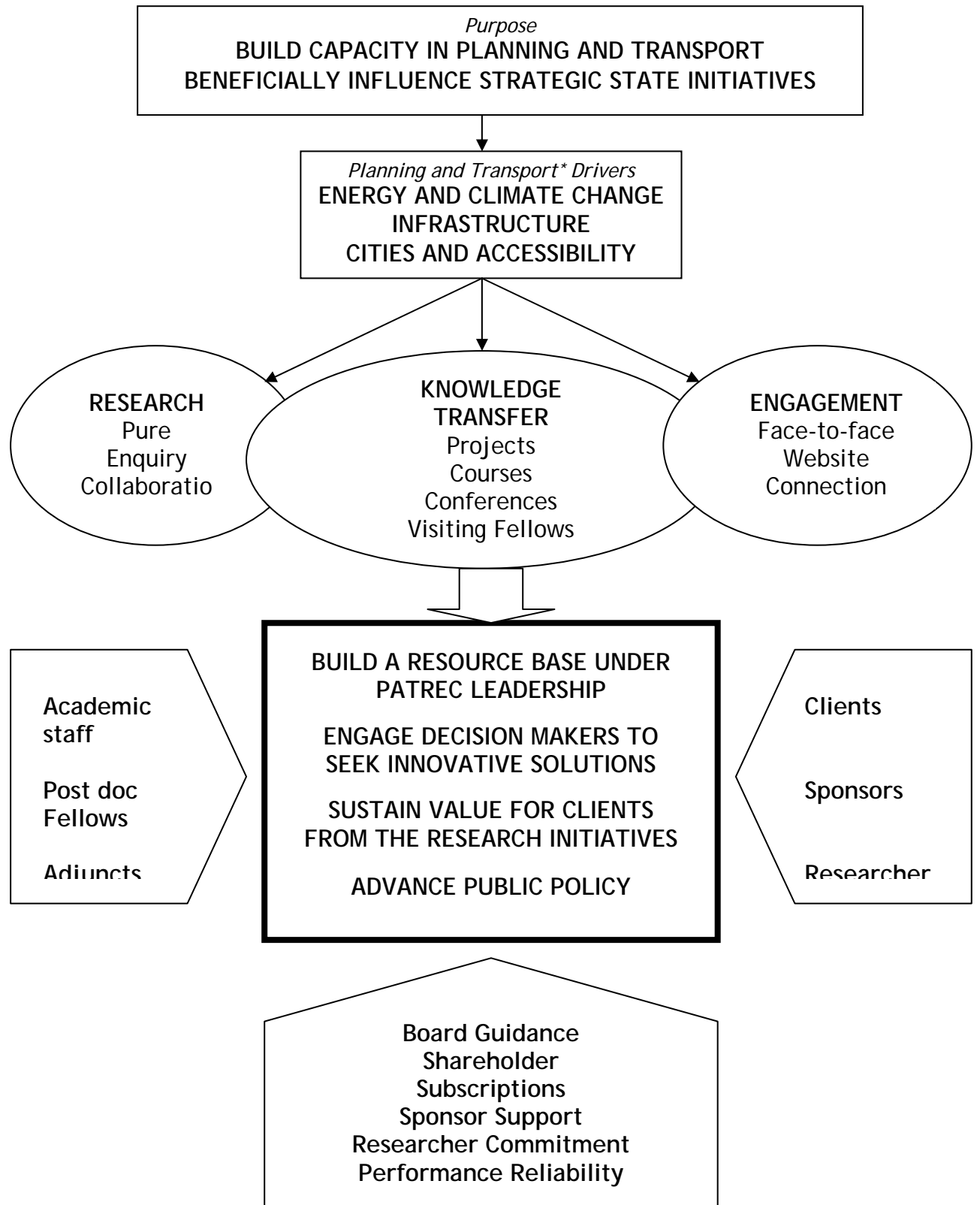
Prepared by:  
Professor Greg Martin PSM  
Executive Director

February 2010

Attachment A

Planning and Transport Research Centre

Strategic Plan 2009 - 2010



## \* PLANNING AND TRANSPORT DRIVERS:

With examples of “interest areas” for research and enquiry

### Energy and Climate Change

- Transport energy
- Alternative energy sources
- Fleet management
- Carbon emissions
- Vehicle technology
- ITS applications
- Asset vulnerability - temperature changes, sea level rise, natural disasters
- Coastal protection

### Infrastructure

- Road and rail networks
- Traffic management and control systems
- Indigenous access roads
- Port development
- Industrial land and utility services coordination
- Rail economics
- Transport safety
- Access regulation
- Freight, logistics and supply chains
- Intermodal terminals
- Asset management

### Cities and Accessibility

- Integrated transport and land use planning
- Activity centres
- Transit oriented development
- Urban design
- Urban services
- Transport corridors
- Public transport
- Walking & cycling
- Parking policy
- Urban freight network
- Built environment and health
- Congestion management

## Attachment B

### Planning and Transport Research Centre

### Business Plan 2009

#### Business Outlook

The end of 2008 saw a dramatic failure of the global financial system, including access to commercial and domestic loan funding and credit. With contraction of economic activity and the decline in consumer confidence, Australian governments are attempting to stimulate the economy and limit adverse effects on employment and living standards. At the same time, government and businesses are cutting costs in the expectation of reduced revenue streams in 2009 and beyond.

In these circumstances, the environment in which to engage clients and sponsors in supporting the activities of PATREC will be more challenging.

#### Drivers

The underlying circumstances remain for the longer term. The drivers centre on meeting demand in a sustainable way, i.e. meeting demand while managing within constraints.

- Demand - population growth, economic growth, urban congestion, regional services
- Climate change - GHG emissions, temperature rise, sea level changes
- Energy supply - alternative sources, supply, costs
- Cost of urban services - utilities, public transport, communications
- Community expectations - accessibility, livability, social equity

#### Objectives

- Mobilise and strengthen shareholder support
- Broaden contacts and liaison across the universities
- Establish wider and longer term government agency and industry partnerships
- Engage more researchers and practitioners on PATREC project initiatives
- Facilitate a continuing program of knowledge transfer between researchers and practitioners

## **Actions for 2009**

In accordance with the primary interest areas in the PATREC Strategic Plan, the actions planned are:

- Lead/participate in project/program initiatives - e.g. indigenous community access roads, road pavement research centre, business intelligence project for  
  
vehicle and driver licensing (ARC Grant submission), real time monitoring and management of the Metropolitan road network (ARC Grant submission), South West regional transport study, Perth Airport transport study
- Host three overseas Visiting Research Fellows (Litman, Cervero, Schipper) workshops, lectures and sponsor visits
- Determine scope for a Masters degree with a specialty in transport and logistics
- Develop industry relationships - e.g. mining, ports, rail and road transport, safety, urban development
- Develop government agency relationships - e.g. state development, mining and petroleum, local government
- Develop community organisation relationships - e.g. RAC, WALGA, road safety
- Participate in government advisory committees/boards - freight transport, taxi industry
- Explore research opportunities with faculties/schools of business, engineering, health and social sciences across universities
- Convene workshops/symposia on rail economics and transport data, PATREC Connection events and the 2009 Annual PATREC Research Forum
- Continue to support students, researchers and advisory boards in participating universities - e.g. CBE&H, C-MUARC, DEBII, CREST
- Review and refurbish the PATREC website
- Contribute as presenter, discussion leader and panelist to conferences and workshops on current planning and transport issues

## **Assistance by the PATREC Board**

Board members' advice, guidance and direct assistance will ensure the effectiveness of these actions and delivery of valued outcomes.

### **Key Performance Indicators:**

- Number of projects and assessed value to stakeholders
- Sponsorship and fee revenue generated
- Number of conferences, fora, workshops and seminars
- Satisfaction of Board (shareholders) and stakeholders
- Reputation of PATREC as facilitator and/or contributor on public policy
- Financial viability and management of PATREC

### **Board Reports**

The Executive Director will report formally to the PATREC Board at scheduled meetings on 26 February, 18 June and 15 October.

## Attachment C

### Curtin Corner Program 2009

Date	Name	Institution	Title
20 Feb	David Hodgkinson , Lucy Young and Simon Dawkins	Hodgkinson Group	'A Convention for Persons Displaced by Climate Change?'
27 Feb	Trevor Cullen	Edith Cowan University	Does AIDS still require an exceptional response?
6 Mar	Janette Hartz-Karp	Curtin University Institute of Sustainability Policy (CUSP), Curtin University	Australia's First Citizens' Parliament
13 Mar	Michael Schaper	Australian Competition and Consumer Commission	Small Business in 2009: Competition Policy and the Global Financial Crisis
20 Mar	Giuseppe (Joe) Ripepi	Curtin PhD Student	Devolution or disempowerment? – Contemporary models of essential functions and services delivery and the implications for selected Western Australian rural communities
27 Mar	Louise Schaper	CHIK Services	A Pebble in the Pond: A Vision for E-Health Enabled Healthcare Transformation
3 Apr	Barbara Pini Paula McDonald	JCIPP/Queensland University of Technology	Young People and Work
17 Apr	Linda Shields	Nursing, Curtin University	Nursing in Nazi Germany
24 Apr	Theodora Issa	Curtin Business School	Ethical Mindsets, spirituality, and aesthetics in the Australian Services Sector
8 May	Michael McLure	University of Western Australia	Royalties for Regions
15 May	Peter Newman	CUSP, Curtin University	Transport Policy in Cities
22 May	Michael Dockery	Curtin Business School	Culture and Indigenous Australians' socio-economic wellbeing.
29 May	Katie Dunworth	Curtin University	Teaching English as a Second Language
5 June	Christopher Phillips	Democracy Café	Socratizing and Education for Democracy
19 June	Kashif Mumtaz	JCIPP Visiting Fellow	Current Political and Security Issues in Pakistan
10 July	Dr Jeff Bremer	Sinclair Knight Merz	Carbon Trading and the Energy Economy in 2050
17 July	Dr John Simpson	Economics and Finance - Curtin University of Technology	Why Have Australian Banks Survived the Global Financial Crisis?
24 July	Professor Tim Brennan	University of Maryland Baltimore County	Behavioural Economics and Conventional Economics: Complements or Substitutes?
31 July	Professor Alan Fenna	John Curtin Institute of Public Policy	Evidence-based Policymaking
7 Aug	Ian Austin	Edith Cowan University	Common Foundations of American and East

Date	Name	Institution	Title
			Asian Modernisation
14 Aug	Dr Angela Wardell-Johnson	Centre for Advanced Studies in Australia, Asia and the Pacific - Curtin University of Technology	Rural Image: A History of Influences on Current Representations
21 Aug	Stephan Millett	Curtin Health Innovation Research Institute	Medical Ethics: A Philosophical Examination of the Case of Christian Rossiter
28 Aug	Nathan Taylor	WA Chamber of Commerce and Industry	Local Government for Local Communities
4 Sep	Alan Tapper	John Curtin Institute of Public Policy	What is 'Professional Ethics'?
11 Sep	Roy Jones	Humanities - Curtin University of Technology	From 'Shackies' to Silver Nomads. Coastal Recreation and Coastal Heritage in Western Australia
18 Sep	Leighton Jay	Management - Curtin University of Technology	Vela Microboards Australia
25 Sep	Janine Douglas	Edith Cowan University / WA Dept of Agriculture and Food	"There is nothing a government hates more than to be well-informed..." (John Maynard Keynes)
16 Oct	Karl O'Callaghan	WA Police Commissioner	Police Force Ethics and Public Trust
23 Oct	Nick Wills-Johnson	Planning and Transport Research Centre – Curtin University of Technology	Providing Infrastructure to Aboriginal Communities: Looking for a Rosetta Stone?
30 Oct	Dr Chris Birdsall-Jones	John Curtin Institute of Public Policy	The Bronx: The Marking of Social Exclusion in Australian Towns and Cities
6 Nov	David Charles	Dean of Research and Development , CBS, Curtin University of Technology	Learning and Knowledge in the City