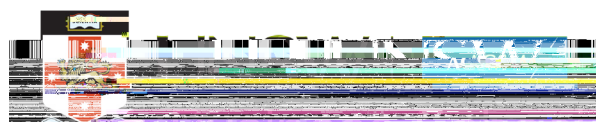


Centre for Applied Economic Research (CAER)

Annual Report 20



CENTRE FOR APPLIED
ECONOMIC RESEARCH



Entity	Nature of interaction
Outside UNSW – Cont.	
Statistics Netherlands	On-going engagement with the Economic Measurement Initiative and the Real Estate Initiative.
RF Capital	On-going engagement with the Real Estate Initiative; Industry partner on joint Australian Research Council Linkage Grant.
CorVal Partners Limited	Industry partner on joint Australian Research Council Linkage Grant with the Real Estate Initiative.
Jones Lang LaSalle (JLL)	On-going engagement with the Real Estate Initiative.
The Urban Taskforce Australia	On-going engagement with the Real Estate Initiative.
Property Council of Australia	On-going engagement with the Real Estate Initiative.
Reserve Bank of Australia	On-going engagement with the Real Estate Initiative.
Herbert Smith Freehills law firm (Sydney)	On-going engagement with the Law and Economics Initiative; Key donor of the Law and Economics Initiative.

1.3 Governance and management of CAER

Director

Professor Kevin Fox, School of Economics, UNSW

Deputy Director

Associate Professor Peter Kriesler, School of Economics, UNSW (till October 2016)

Associate Professor Mariano Kulish, School of Economics, UNSW (from October 2016)

Steering Committee

Professor James Morley (Associate Dean Research, UNSW Business School)/ Professor Elizabeth Carson (Acting Associate Dean Research) – Chair

Professor Kevin Fox (Director, CAER)

Professor Jerry Parwada (Head, School of Banking and Finance)

Mr Tim Harcourt (J.W. Nevile Fellow in Economics)

Ms Fei Wong (General Manager, UNSW Law)

1.6 CAER's mission, objectives and history

Mission

CAER's principal mission is to undertake, support and advance applied economic research in established or emerging areas of high research priority so as to deliver benefits to the academic and broader communities, both within Australia and world-wide. In achieving its mission CAER may also play a role, where appropriate, in developing and advancing educational activities. CAER's research activities are carried out through its research initiatives where each initiative focuses on a specialised research area. In selecting its research initiatives and agenda CAER gives great emphasis on interdisciplinary and multidisciplinary research, thus complementing and exceeding the research activities and outcomes that can be achieved by individual schools and faculties. It also ensures that its research activities align with the strategic goals and priorities of UNSW.

Objectives

In pursuing its mission CAER has the following strategic objectives:

Carry out, encourage and enhance applied economic research with an interdisciplinary and multidisciplinary focus that addresses current policy issues both within Australia and globally.

Encourage and support collaborative research across schools and faculties both at the national and the international level.

Support and facilitate research training and career opportunities for outstanding Australian and international students and researchers.

Build and enhance UNSW research capacity and outcomes through stimulating network opportunities

(Dr Maggie Hu, Dr Christopher Gibbs, Dr Nalini Prasad, Dr Xiangling Liu and Dr Shanaka Herath) and one Honours Student (Mr Aaryn Lally) participated in the research activities of CAER's Real Estate Initiative. CAER's support and mentoring of UNSW postgraduate students and early career researchers in 2016 was further enhanced by hosting international visitors and organizing events while encouraging their involvement in these visits and events. For example, UNSW early career academic Dr Nalini Prasad participated as a chair at CAER's second annual Real Estate Symposium.

Build and enhance UNSW research capacity and outcomes through stimulating network opportunities and exposure to cutting-edge research.

CAER's commitment to building and enhancing UNSW research capacity and outcomes is shown by the following activities undertaken in 2016:

Visitors

In 2016 CAER supported domestic and international collaboration by hosting nineteen visitors. These visits of distinguished and internationally-recognized visitors assist stimulating CAER's research activities and provide staff and students the possibility of interactions with leading researchers in diverse areas of investigation. Among other activities, these visits usually involve a formal presentation given by the visitor.

Conferences, workshops and special events

In 2016 CAER organized the EMG Workshop as part of its objective of helping academics and students become leading and internationally-recognized researchers. The workshop typically involves academics from overseas and around Australia, and representatives from the public and private sectors. The success of the workshop has led it to become a regular and well-attended event of international standing.

In addition, CAER hosted its second annual Real Estate Symposium in September 2016. The Symposium aims to gather academics, industry researchers, and government policy makers to discuss real estate related issues and their implications on policy. The Symposium opened with a keynote address by Professor Fred Hilmer, former Vice Chancellor of UNSW and influential expert on national competition policy, and featured a mixture of both academic and industry speakers and chairs. The Symposium was a showcase of some of the latest research into Australian real-estate and it was covered in a TV report on Channel 9 News. The success of this second Symposium demonstrates CAER's on-going role in fostering new engagements relevant for a wide range of sectors.

Lastly, the Law and Economics Initiative of CAER organized two special lunch talks in 2016. The first talk was delivered by Associate Professor Betsey Stevenson of the University of Michigan who discussed the five challenges the labour market faces and the implications for economic growth. The second talk was delivered by Professor Eric Talley of Columbia Law School who presented his analysis of the shareholder activism debate within a theoretical securities-market framework, offering a new theoretical account of managerial long termism and hedge-fund short termism, and new insights relevant to behavioural corporate governance. Presentations such as these provide a stimulus to research at UNSW and great exposure to recent developments in areas of high research priority.

Academic, industry and government engagements

In 2016 CAER continued to foster and expand its linkages with the broader academic community, industry and the public sector:

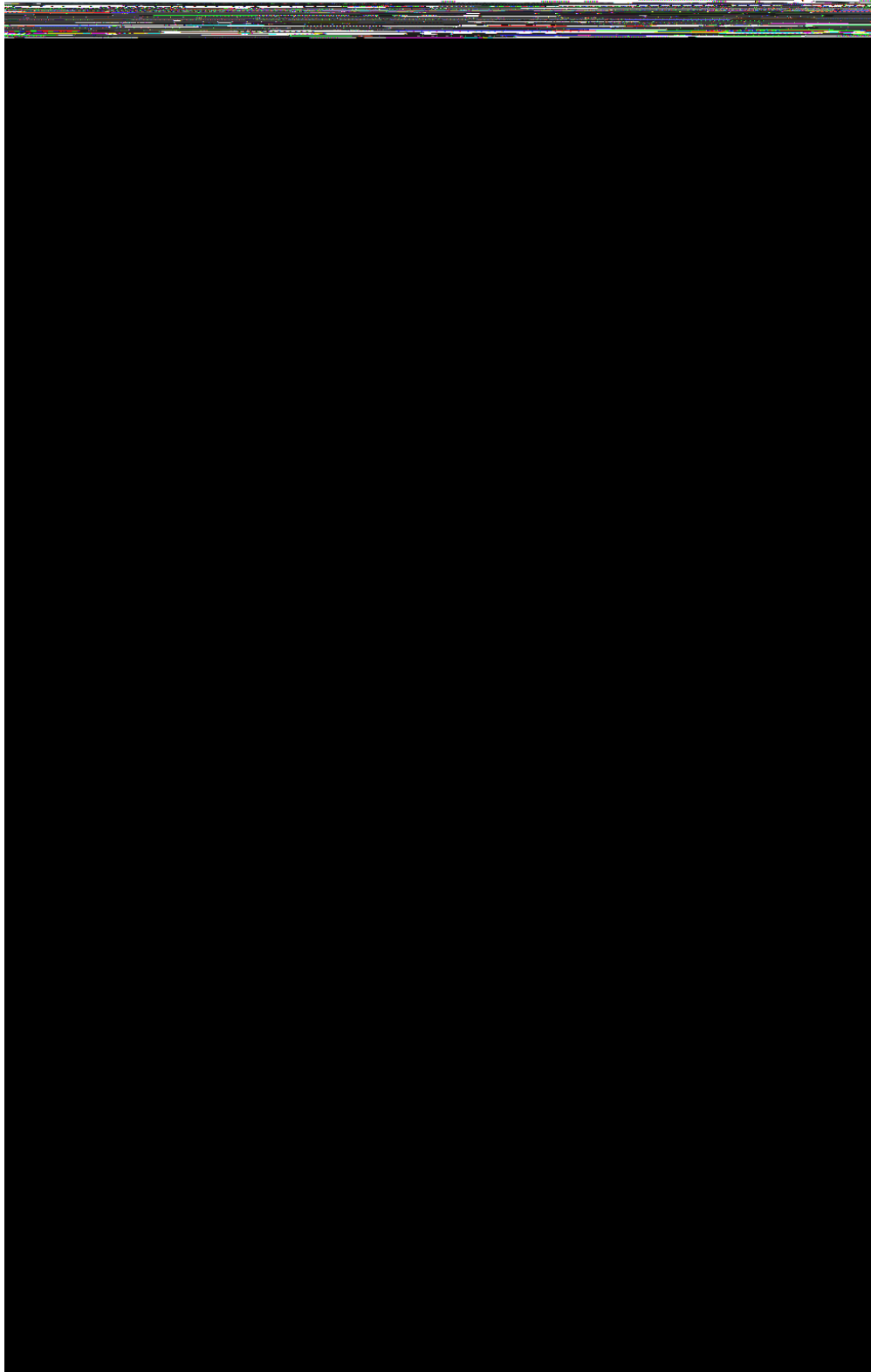
- In May 2016 Dr Nigel Stapledon made a presentation to a group of US hedge funds on the Australian property market at Macquarie Securities offices in Sydney CBD. Dr Luci Ellis, head of financial stability at the Reserve Bank of Australia, also presented at this gathering.
- The Urban Taskforce Australia and CAER's Real Estate Initiative organized a Morning Tea Seminar/Forum with Associate Professor David Albouy of the University of Illinois on Housing Demand, Cost-of-Living Inequality, and the Affordability Crisis. The event was held on the 26th of May and was hosted by Norton Rose Fulbright at their offices in Sydney's CBD.
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- During 2016 Professor Kevin Fox was a member of the Australian Bureau of Statistics Methodology Advisory Committee and of the Australian Bureau of Statistics Productivity Measurement Reference Group.
- During 2016 Professor Kevin Fox was a member of the Committee for Economic Development of Australia (CEDA) Advisory Group and provided expert advice on their research report on improving the productivity of services.
- In February 2016 Professor Kevin Fox met with Ian Ewing (Program Manager, National Accounts Branch, Group Strategies and Governance Unit, Statistical Services Group) and Kathrine Keenan (Director, Productivity Analysis) of the Australian Bureau of Statistics to provide expert advice on their productivity research agenda.
- In March 2016 Professor Kevin Fox was invited to visit the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES, Canberra) and present his work on "Natural Resources and Ecosystem Services in Productivity Measurement".
- In June 2016 Professor Kevin Fox met with Luiz de Mello, Deputy Director for Public Governance and Territorial Development of the OECD, to discuss Professor Fox's work on productivity in the public sector.
- In July 2016 Professor Kevin Fox visited the U.S. Bureau of Economic Analysis and presented his work on "Decomposing Value Added Growth over Sectors into Explanatory Factors".

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4. Statement of financial performance certified by the UNSW Business School's Finance Manager for the year ended 31 December 2016



Additional notes:

Estimated value of in-kind contribution to CAER's administration⁹

	Type of Activity	Value of Contribution
Professor Kevin Fox	Director	46,671
Associate Professor Peter Kriesler/ Associate Professor Mariano Kulish	Deputy Director	16,033
Professor James Morley (Associate Dean Research)/ Professor Elizabeth Carson (Acting Associate Dean Research)	Steering Committee	7468
Professor Jerry Parwada (Head, School of Banking and Finance)		
Mr Tim Harcourt (J.W. Nevile Fellow in Economics)		
Ms Fei Wong (General Manager, UNSW Law)		
UNSW Business School administrative support	HR, IT, finance and marketing support	13,113
Total in-kind		83,285

6.2 Cash contributions¹⁰

Entity	Purpose	Cash Contribution
School of Economics	Support for the EMG Workshop 2016	\$5,000
Total cash		\$5,000

6.3 Infrastructure and other resources provided to CAER

In mid-2016 the UNSW Business School's Research Office allocated to CAER a new office space in the Quadrangle Building (Quad 1039). The new office space includes three offices and four workstations. It also includes a meeting room, printer/photocopier and a kitchen which are shared with the Industrial Relations Research Centre (IRRC). Dr Stapledon and Dr Syed were each allocated an office within the new space while the third office is reserved to CAER's visitors and four the workstations are reserved to CAER's postgraduate students. The rest of CAER members provided their own office space (including computers) on or off campus. The School of Economics provided office space and printer/photocopier facilities for CAER administrative staff. The UNSW Business School provided additional meeting space.

Diewert, W.E. and **K.J. Fox**, 2016, "Alternative User Costs, Rates of Return and TFP Growth Rates for the US Nonfinancial Corporate and Noncorporate Business Sectors: 1960-2014", UBC Discussion Paper 16-03. Presented at the Society for Economic Measurement Conference, July 2016, Thessaloniki.

Diewert, W.E. and **K.J. Fox**, 2016, "A Decomposition of U.S. Business Sector TFP Growth into Technical Progress and Cost Efficiency Components", UBC Discussion Paper 16-04. Presented at the Society for Economic Measurement Conference, July 2016, Thessaloniki.

Diewert, W.E. and **K.J. Fox**, 2016, "The Digital Economy, GDP and Consumer Welfare", a paper presented at the EMG Workshop, December 2016, UNSW, Sydney.

Diewert, W.E. and **K.J. Fox**, 2016, "Money and the Measurement of Total Factor Productivity", a paper presented at the School of Economics' seminar series, University of Queensland, June 2016.

Kulish, M. and D. Rees, 2016, "Unprecedented Changes in the Terms of Trade," *Journal of International Economics*, revise-and-resubmit.

Hu, M.R. P

Editorial activities

- **Kevin Fox**, Associate Editor, *Journal of Productivity Analysis*.
- **Richard Holden**, Editor, *Journal of Law and Economics*.

Professional memberships

- **Kevin Fox**, member of the Policy and Advocacy Committee of the Academy of the Social Sciences in Australia.
- **Kevin Fox**, member of the Panel B Committee of the Academy of the Social Sciences in Australia.
- **Kevin Fox**, elected as a member of the Council of the International Association for Research in Income and Wealth, August 2016.
- **Richard Holden**, elected as a President of the Australian Law and Economics Association, the Australian National University, November 2016.
- **Richard Holden**, member of the Program Committee and session organizer of the Econometric Society Australasian Meetings, 2016.

Invited speaker/chair/participant

- **Kevin Fox**, Invited Speaker, *Workshop on CPI Scanner Data Strategy*, hosted by the Australian Bureau of Statistics, June 2016, Melbourne.
- **Nigel Stapledon**, Invited Speaker, an Industry Lunch event on *the Negative Gearing Debate*, organized by the Urban Taskforce Australia, June 2016, Sydney, Australia.
- **Kevin Fox**, Invited Speaker, *Workshop on Shaping the Next Decade: Economic trends in the Global Economy*, organized by the Australian Treasury and the Centre for Applied Macroeconomic Analysis at the Australian National University (CAMA), August 2016, Canberra.
- **Kevin Fox**, Invited Participant and Chair, *Delivering the Future - Policy Roundtable*, organized by the Academy of the Social Sciences in Australia, September 2016, Canberra.
- **Kevin Fox**, Invited Speaker, *Australian Law and Economics Association National Conference*, organized by the Centre for Law and Economics, Australian National University, November 2016, Canberra.
- **Kevin Fox**, Invited Speaker, *Workshop on Productivity insights and firm-level data analysis*, organized by the Australian Treasury, December 2016, Canberra.
- **Erwin Diewert**, Invited Speaker, *Workshop on Productivity insights and firm-level data analysis*, organized by the Australian Treasury, December 2016, Canberra.

8. Details of

- During 2016 Dr Iqbal Syed visited the University of Amsterdam and Delft University of Technology and held discussions with its academics staff on possible future research collaboration and engagements on various real estate related topics.
- In July 2016 Professor Erwin Diewert organised a well-attended session on “How Best to Measure Hedonic Property Price Indexes” at the Society of Economic Measurement Conference held in Thessaloniki, Greece.
- Reflecting the rising profile of Real Estate as an area of study and research at the UNSW Business School, the following students from Dr Nigel Stapledon’s ECON3130 Real Estate Economics and Public Policy course made a poster presentation at the UNSW Business School’s Student Research Fair (Undergraduate Research Posters session) in September 2016:
 - Amanda Kovacs on “Bursting the bubble: Australia’s Housing Market”
 - Bradley Moody, Andreas Trikoulis and Rupen Akpinar on “The Australian Housing Market: Implications of Government Policy on Housing Prices”
 - Eric Ching Lay, Marker Wang and Jeffrey Shen on “The Australian Housing Market: The Movement Behind Higher House Prices”
 - Tiffany Hiu Yan Cheung, Erica Lu and Kevin Nicholas Jasin on “Factors Influencing Rising Prices of Housing in Australia”
 - Anni Gao and Timothy Nguyen on “Exploring the Housing Price Boom in Australia”
 - Warren Joseph Saldanha, Emily Yeh Wei Tham, Shan Amy Hong and Mervin Geng Hao Yap on “An Investigation into the History of Housing in Australia - Factors Leading to Price Growth”
 - William Martin Ellwood on “Housing in Australia – What is Causing the Sudden Price Hike in Property Markets?”

Amanda Kovacs won the Undergraduate Research Posters - Best Poster award for her poster presentation.

- Dr Nigel Stapledon organised a competition for UNSW student teams in order to select a representative team to compete in the University of Sydney Real Estate Case Competition. In the later competition two Australian teams were to be selected in order to compete in the Cornell University Real Estate Case Competition in New York. Six teams competed for a place in the two heats and the winning team performed creditably in the US competition, which included teams from Melbourne University and University of Queensland.
- Professor Richard Holden participated as a panel member of UNSW Business School’s experts who analysed the 2016 Federal Budget and its implications at an event hosted by Dean Chris Styles: “Budget 2016 - BusinessThink Federal Budget Roundtable” in May 2016 at Sydney’s CBD.

Industry engagements

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- During 2016 Professor Kevin Fox held discussions with Alastair Nash, real estate associate of Blackstone, on possible future collaborations between Blackstone and the Real Estate Initiative.
- In 2016 Associate Professor Glenn Otto was a member of the judging panel for the Australian Real Estate Business Awards. The Australian Real Estate Business Awards are provided by Sterling Publishing and cover three categories: innovator of the year, boutique network of the year and major network of the year. In the selection process real estate agencies submit applications addressing the criteria for a particular award and these are reviewed by the judging panel. Then the CEOs or managing directors of the real estate agencies are interviewed by the judging panel before the winners are selected.

Government engagements

- In 2016 Professor Kevin Fox provided contracted expert opinion on R&D spill-overs for the Department of Education and Training.
- In 2016 Professor Kevin Fox provided expert opinion (contribution) to the White Paper on Environment-adjusted TFP Measure prepared by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) for the Fifth Meeting of the G20 Agricultural Chief Scientists (MACS) held in China in May 2016.
- During 2016 Professor Kevin Fox was a voluntary member of the Department of Communications and the Arts' Digital Productivity Reference Group. The Reference Group

- In June 2016 Professor Kevin Fox met with Luiz de Mello, Deputy Director for Public Governance and Territorial Development of the OECD, to discuss Professor Fox's work on productivity in the public sector.
- In July 2016 Professor Kevin Fox visited the U.S. Bureau of Economic Analysis and presented his work on "Decomposing Value Added Growth over Sectors into Explanatory Factors".
- In September 2016 Professor Kevin Fox met with Lisa Wardlaw-Kelly (Program Manager for environment and agriculture statistics programs) and Mark Lound (Director Environmental Statistics Section) of the Australian Bureau of Statistics to provide expert advice on the development of the environmental accounts program, especially around ecosystem accounts and SEEA agriculture.
- As part of its teaching program the Economic Measurement Initiative hosted Josef Manalo (Department of the Prime Minister and Cabinet) as a guest lecture in Professor Kevin Fox's ECON4309/6309 Economic Measurement course in the second semester 2016. During the lecture Josef made a presentation on "Economic Measurement for Policymakers". The presentation covered the following topics: (i) inflation measurement and analysis, (ii) wage price growth and the determination of public sector wages, and (iii) why the "Digital Economy" should matter for policy makers. The presentation and the discussion that followed emphasised the importance of good economic measurement in informing real world policy decisions, highlighting the practical importance of the material taught in the course.
- In November 2016 Professor Kevin Fox visited the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES, Canberra) and provided expert opinion on environmental and ecosystem services accounting. He also explored and discussed possibilities for future research collaborations.
- During 2016 Dr Chris Gibbs provided expert advice and assistance to the Reserve Bank of Australia on the inclusion of housing in their Dynamic Stochastic General Equilibrium modeling of the Australian economy.
- During 2016 Professor Kevin Fox provided expert advice to the Australian Bureau of Statistics on the measurement of land estimates thus leading to their further work on improving these estimates.

8.4 Media engagement

The following is a list of media engagement undertaken by CAER members in order to raise the profile of CAER and UNSW in the broader community:

On-going

- **Professor Richard Holden**, weekly commentator on Peter van Onselen's PVO NewsDay on SkyNews Australia.
- **Professor Richard Holden**, monthly op-ed writer for the Australian Financial Review.

9. Details of research supervision and teaching activities carried out by CAER members on behalf of academic units

9.1 Research supervision

Postgraduate research supervision activities within CAER are coordinated with the relevant Schools/Faculties (mainly the School of Economics and UNSW Business School), in accordance with the relevant UNSW policies, procedures and delegations. The following is a list of research supervision carried out by CAER members in 2016 as part of their initiative activities. CAER members are marked in bold.

PhD Supervision

Supervisor: **Rosalind Dixon**

Bhatara Ibnu Reza: *The Development of the Militia as the Implementation of the Total People's Defense and Security in Indonesia*

In progress

Supervisor: **Rosalind Dixon**

Doron Goldbarsht: *Counter-Terrorist Financing: A Study in Effectiveness and the Rule of Law in Global (er*

9.2 Teaching activities

Economic Measurement Initiative

- In 2016 Professor Kevin Fox delivered a short training course on: “An Introduction to the Theory of Economic Measurement” to staff at the Australian Bureau of Statistics and the Australian Treasury, Canberra.
- In April 2016 School of Economics Lecturer Judith Watson has spoken to Professor Kevin Fox about quantitative methods, CAER’s three main areas of research (Real Estate, Law and Economics and Economic Measurement), and the Centre’s role in informing public policy. The video interview was held as part of a Teaching and Learning Enhancement Project being carried out by Dr Alice Shiu of Hong Kong Polytechnic University in collaboration with Judith Watson with the aim to enhance students’ learning and understanding of quantitative methods in real world situations. In the interview Professor Kevin Fox also discussed the importance of high quality data in producing better information for policy and business decisions. Dr Alice Shiu is a former PhD student of Professor Fox and this collaboration was part of the School of Economics’ and C3 (l)3.1 (d)-12.3 n and

11. A record of dates and attendance at meetings of CAER's Steering Committee

Date	Attendance	Apologies
23/		