



# ISCR

Institute for Safety, Compensation  
and Recovery Research

## Measuring return on investment in research: a case study

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A joint initiative of

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TRANSPORT  
ACCIDENT  
COMMISSION



MONASH  
University

Research  
to  
Action

# “The birth of ISCRR

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*The establishment of the Institute represents a long-term commitment by the funding partners to innovation and change...It is a major opportunity to add to the culture of learning in Victoria's compensation schemes through evidence-based research, and to provide national leadership in this area”*

Chairman, Annual Report, 09/10



# The problem

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# Our partners' aspirations

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- A partnership between WorkSafe Victoria, The Transport Accident Commission and Monash University
- The two schemes were seeking to develop research capacity more aligned to their needs; and to ensure research outputs were:
  - Relevant
  - Timely
  - Actionable
- The University was seeking to develop a model for collaborative research processes

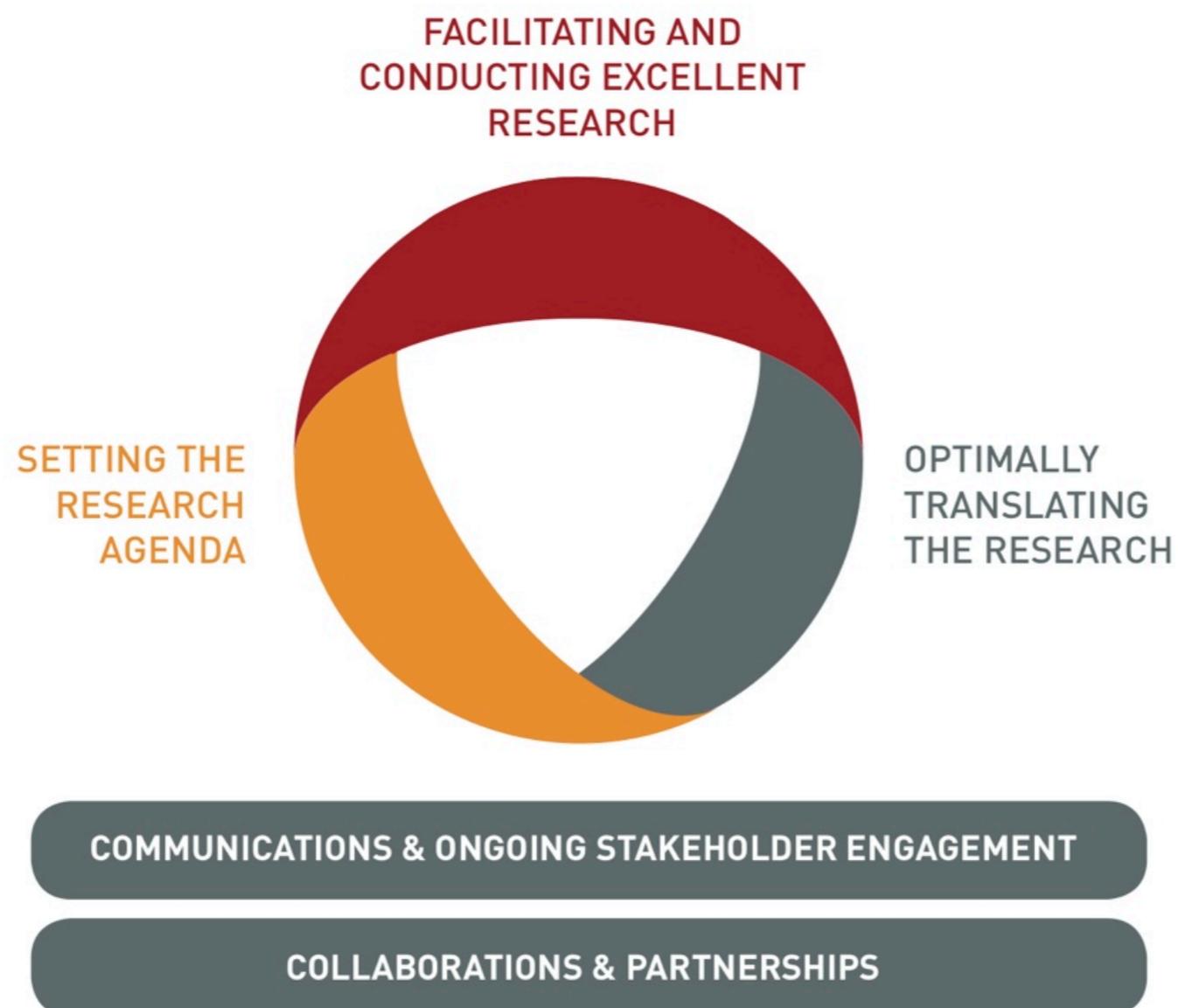
# Our goals

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- Have a high impact on scheme performance
- Create a model of excellence for industry led research
- Be acknowledged leaders in compensation scheme research

# Collaborative research model

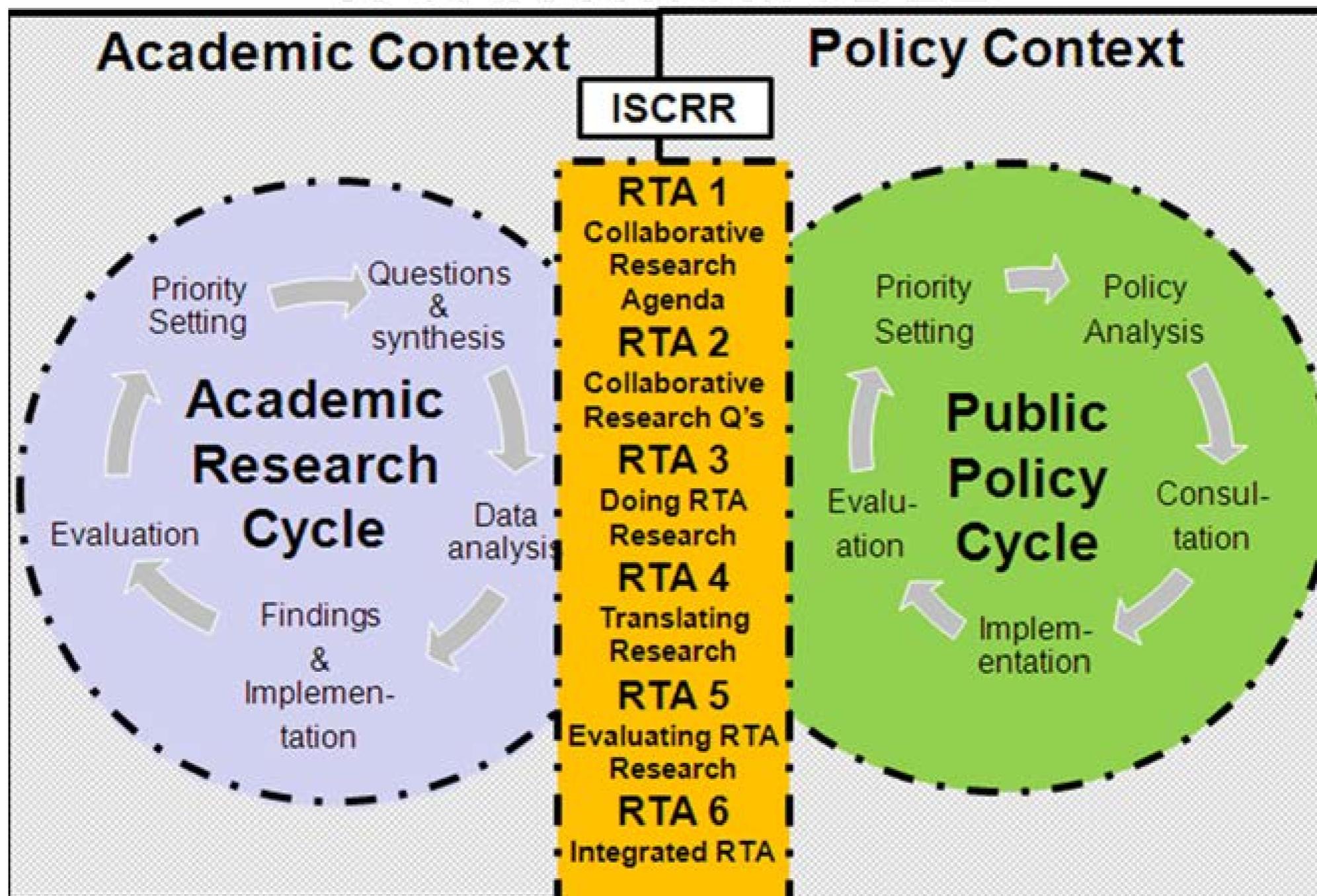
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# ISCRRR's Research To Action Model

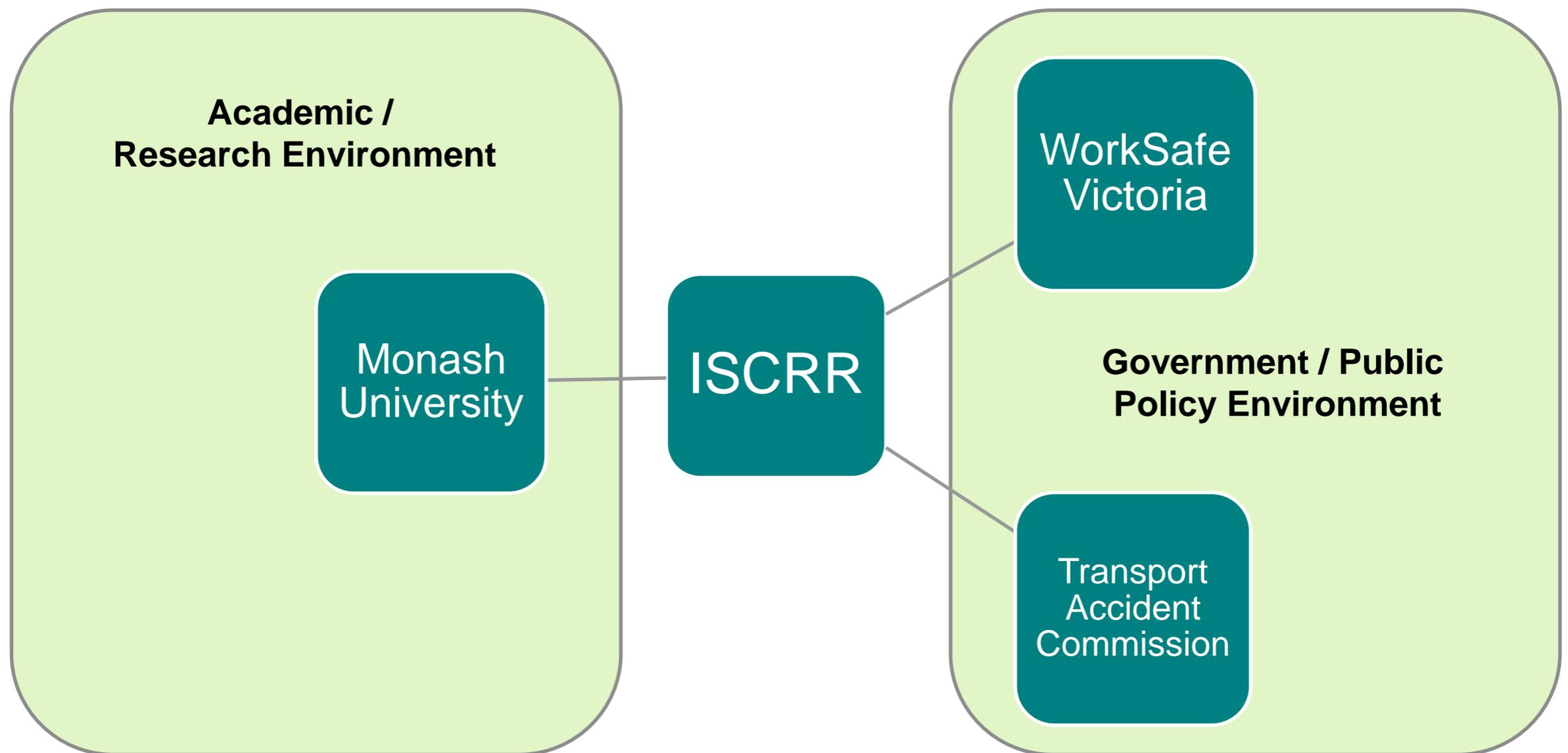
Facilitating interaction at key points of the policy and research cycle

## ISCRRR RTA MODEL



# Application to ISCRR

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# With a review looming, our challenge was to work out how to measure our impact ..PDQ!

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- There is currently no best practice for measuring the impact of research evidence in public policy
- Academia typically focuses on output measures (eg, peer-reviewed publications) and input measures (eg, grant income)
- Very few published examples of assessing research utilisation / adoption or research outcome / impact
- Aims of the ROI project:
  - To assess the adoption of ISCRR research by WorkSafe and the TAC
  - To identify factors that lead to the adoption of research
  - To assess the impact of ISCRR research on WorkSafe and the TAC
  - To describe the types of impact ISCRR research has had

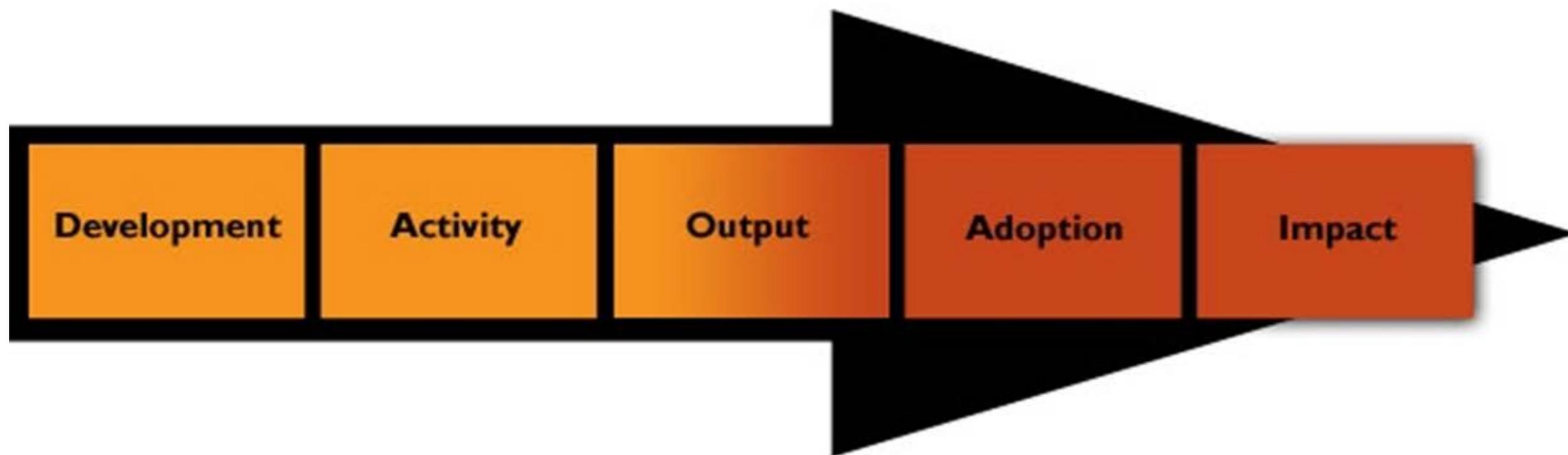
# Return on Investment project

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- Initiated Dec 2011 by ISCRRR Board
- Project steering committee:
  - ISCRRR (Chair of Board, CEO, Chief Research Officer)
  - Monash University (Deputy Vice Chancellor – Research Office)
  - WorkSafe Victoria (Lead Actuary, Actuarial consultant)
  - Transport Accident Commission (Lead Actuary, Senior Manager Claims Research)
- Methods:
  - Qualitative content analysis of project-level information routinely captured in ISCRRR project management system
  - A series of nine (9) in-depth case study examinations of ISCRRR projects using qualitative and quantitative methods

# Impact Assessment Framework

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Impact Assessment Framework

# Adoption of Research

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- Content analysis of project level information captured in project management system
- N = 30 projects with output as at 30 August 2012 were included
- Evidence of adoption in 27/30 projects
- Types of adoption (after Hanney 2003 following Weiss 1979):
  - Instrumental (N=17)
  - Symbolic (N=7)
  - Conceptual (N=3)

# Factors affecting Adoption of Research n = 27

ADOPTION FACTORS	DESCRIPTION
<b>Engagement and Interaction</b>	The degree and quality of engagement between the researcher/research team and the business sponsor/contact.
<b>Alignment with Partner Strategic Priorities</b>	WorkSafe / TAC's perception of the relevance of the research with regard to their current priorities.
<b>Ease of Implementation</b>	The extent to which the research findings were actionable, or able to contribute to a decision.
<b>Timeliness</b>	Delivery of research while the issue is still being addressed or considered by WorkSafe / the TAC.
<b><i>Partner Organisational Structures and Processes</i></b>	<b><i>WorkSafe and TAC organisational and structural process can affect adoption. Having a structure or process in place to 'receive' the research and process the findings facilitated adoption.</i></b>
<b><i>Internal 'champion' for research</i></b>	<b><i>Research projects that have a strong 'champion' or sponsor for the research within WorkSafe / the TAC have been adopted.</i></b>
<b>Risk and Issue Prioritisation</b>	Research related to areas with high/rising claims costs are more likely to be adopted in a timely fashion.
<b>Credibility of Research Method and Source</b>	Credibility of research methods/scientific analysis process supports adoption. Where the researcher is considered a 'trusted source' that enables adoption.

# Types of Impact n =17

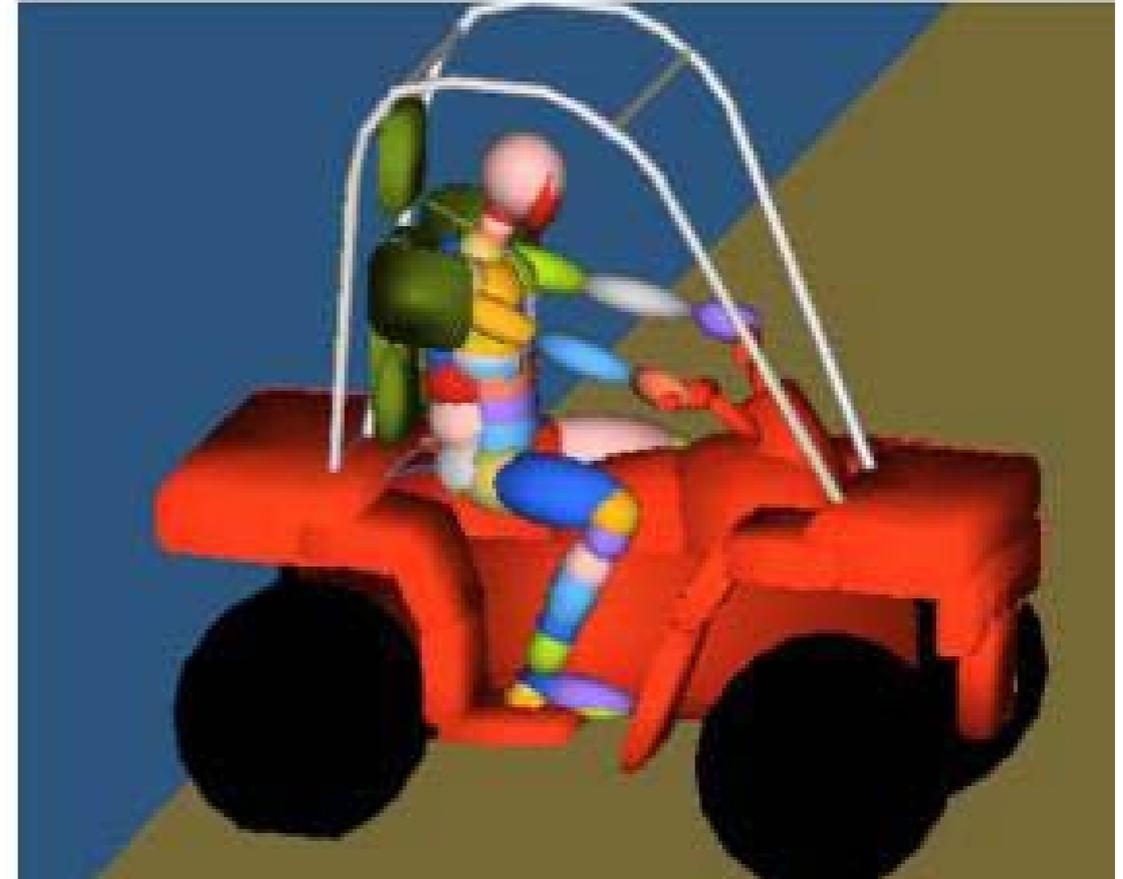
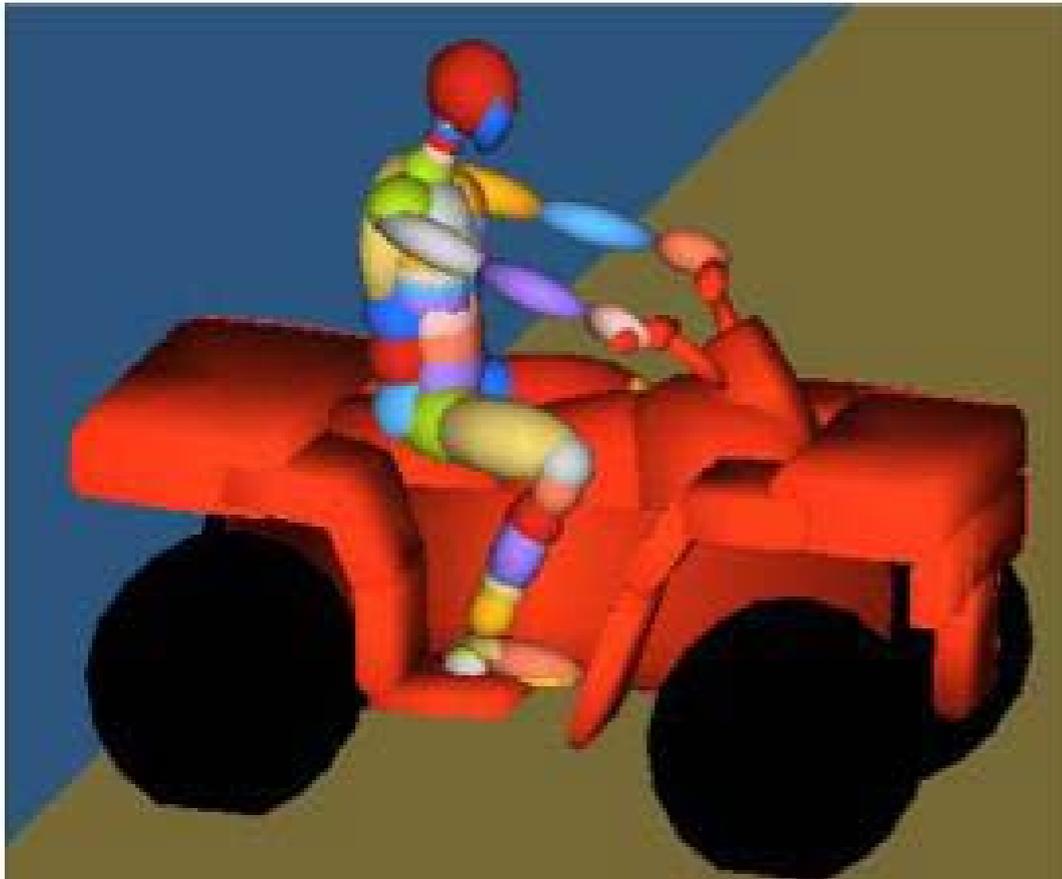
TYPE OF IMPACT	DESCRIPTION
<b>Community/public perception impact</b>	Driving improvements in community perceptions, understanding and awareness of workplace safety issues and solutions.
<b>Client impact</b>	Impact on client outcomes eg quality of life, ability to make informed decisions
<b>Claims processing impacts</b>	Impact related to changes in operational or decision making processes, particularly claims handling processes.
<b>Claims decision making impacts</b>	Claims managers and clinical panel members are able to make evidence informed decisions about provision of appropriate treatment and services, including benefits and risks to the client.
<b>Financial impacts</b>	Impacts related to changes in claims costs or liabilities, or costs avoided.
<b>Employer impacts</b>	Impacts around employer awareness and perception of workplace health, safety and compensation issues.

# Impact of Research – 9 case studies

<b>CASE STUDY</b>	<b>TARGET ORGANISATION</b>	<b>RESEARCH PROGRAM</b>	<b>ROI METHOD</b>
<b>Return to Work Predictive model</b>	TAC	RTW/Recovery	Qual & Quant
<b>Noise induced hearing loss</b>	WS	OHS	Qual & Quant
<b>Implantable pain therapies review</b>	WS/TAC	HDSD	Qual & Quant
<b>Body weight supported treadmill training</b>	TAC	HDSD	Qual & Quant
<b>Quad bike safety devices review</b>	WS	OHS	Qual only
<b>Evaluation of TAC Client conversational tool</b>	TAC	Comp Systems	Qual & Quant
<b>Patient perceptions of recovery</b>	TAC	Comp Systems	Qual only
<b>Pelvic ring fractures</b>	TAC/WS	RTW/Recovery	Qual & Quant
<b>Toolkit for MSK disorders</b>	WS	OHS	Qual only

# A case study of ROI: Quad Bikes

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# Implantable Pain Therapies review

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- Systematic Literature Review
- Purpose
  - To determine the effectiveness of IPTs on health and quality of life of injured people with persistent pain
- Outcome
  - Neurostimulation effective for certain conditions
  - Inconclusive or insufficient evidence regarding the effectiveness of intrathecal infusions
- Adoption
  - Updated health service treatment payment policies for neurostimulation and intrathecal infusions
  - Instrumental use -> translation to policy

# Implantable Pain Therapies review

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- Qualitative impact
  - Shifting the culture towards evidence based decision making
  - Support for a policy stance to impact healthcare practitioner behaviour
  - Cost containment through increased policy effectiveness
- Quantitative impact
  - \$1.81 million in costs avoided consisting of \$654,000 in three years to 2012 and \$1.16 million in future costs avoided (actuarial estimate), for an investment of \$73 460

*"Evidence Service Reviews are the most applied aspect of ISCRR's work. Evidence Service Reviews are designed to give WorkSafe and TAC the upper ground in discussion on clinical decisions and sharpens the focus of practitioners in their clinical decision making".*

Dr Peter Harcourt, Clinical Convenor, Health Services Group

# Impact of Research – 9 case studies

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- Total cost of 9 projects to date = \$725,000
  - Cost of research and implementation costs
- Qualitative value has been diverse and substantial.
- Total financial return to date includes:
  - \$1.5 million liability reduction for WorkSafe Victoria (Noise Induced Hearing Loss project)
  - \$1.81 million cost avoided for WorkSafe (Implantable Pain Therapies review)
  - Up to \$6.835 million in future costs avoided for the TAC (Body Weight Supported Treadmill Training review)
- 3 of the 9 case studies yet to have financial return calculated

# Conclusions

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- Necessity is the mother of invention – ISCRR was obliged to measure the impact of its research and has done so
- Defining impact broadly, but including financial ROI, has worked
- Assessing impact at a project level rather than organisation or program level, has worked for us
- Two-tier assessment: some qualitative data on all projects and selected detailed case studies has been effective. Enabled by routinely collecting data on adoption and impact for all projects via our project management system
- It has been possible to demonstrate significant ROI in 3 case studies
- Qualitative data on adoption and impact will drive further improvement in our translation activities