

Measuring Foresight Impacts

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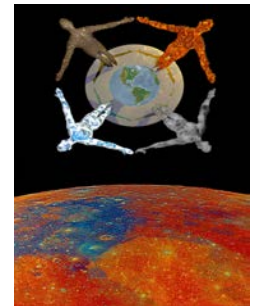
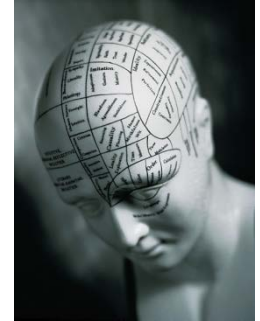
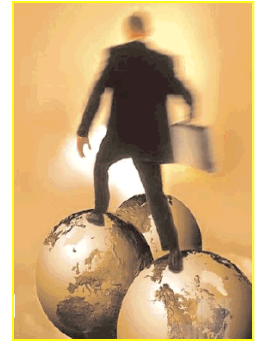
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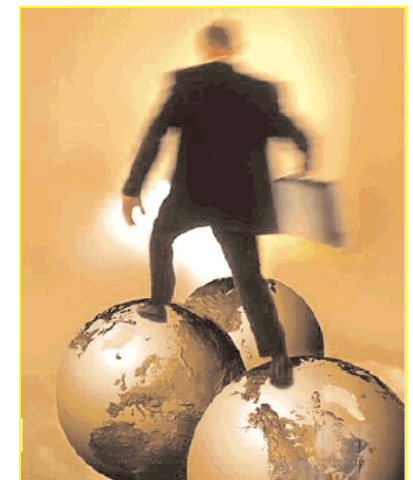
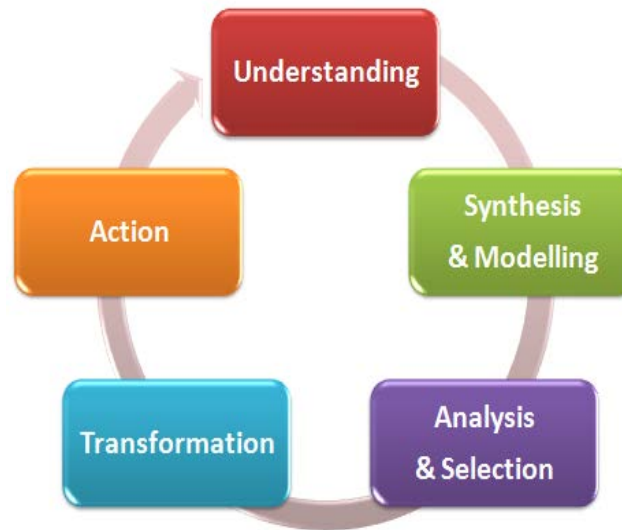
A key recurring challenge has been how to demonstrate the value of foresight investments for government sponsors and stakeholders - who are mindful of accountability, value for government mandates and comparative cost-efficiency and cost-effectiveness with other prospective applications of limited government funds.





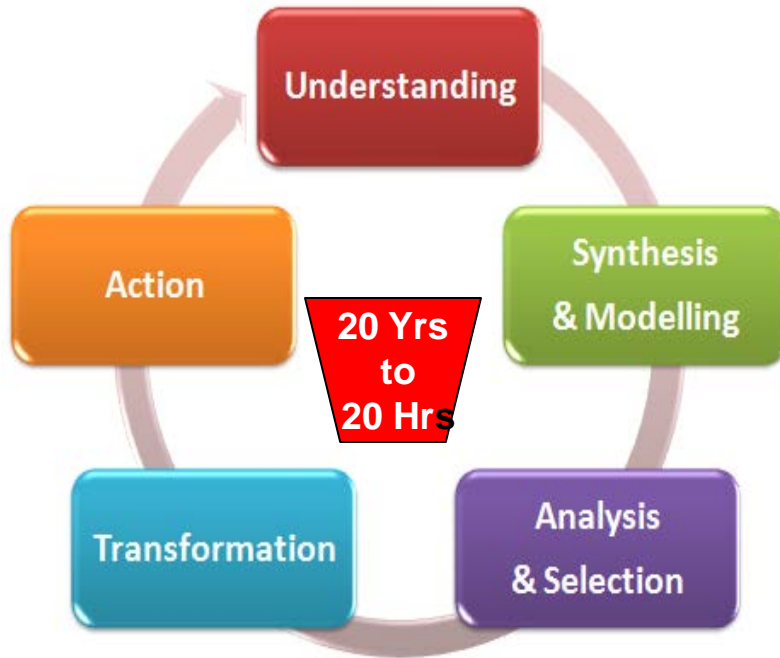
Implications for Government Led Foresight

- More Governments (adopting, supporting, leading)
- Critical Success Factors
- Systemic Foresight with more methodological diversity
- Integrated Foresight - better alignment with Policy Cycle
- Measuring Foresight Impact





Systemic Foresight; Integrated Decision Support Methodology



SFM as a conceptual base for the design, organization and deployment of Integrated Foresight + Intelligence + Business Analytics exercises

Systemic Understanding

Creates shared understanding and mutual appreciation of issues at hand

Systems Synthesis and Modeling

Scanning is translated into conceptual models of the situations involved in the real world

Systemic Analysis and Selection

Analyzes the alternative models of the future and 'prioritizes' them, to create agreed model of "the future" i.e. multiple, plausible, contingent;

System Transformation

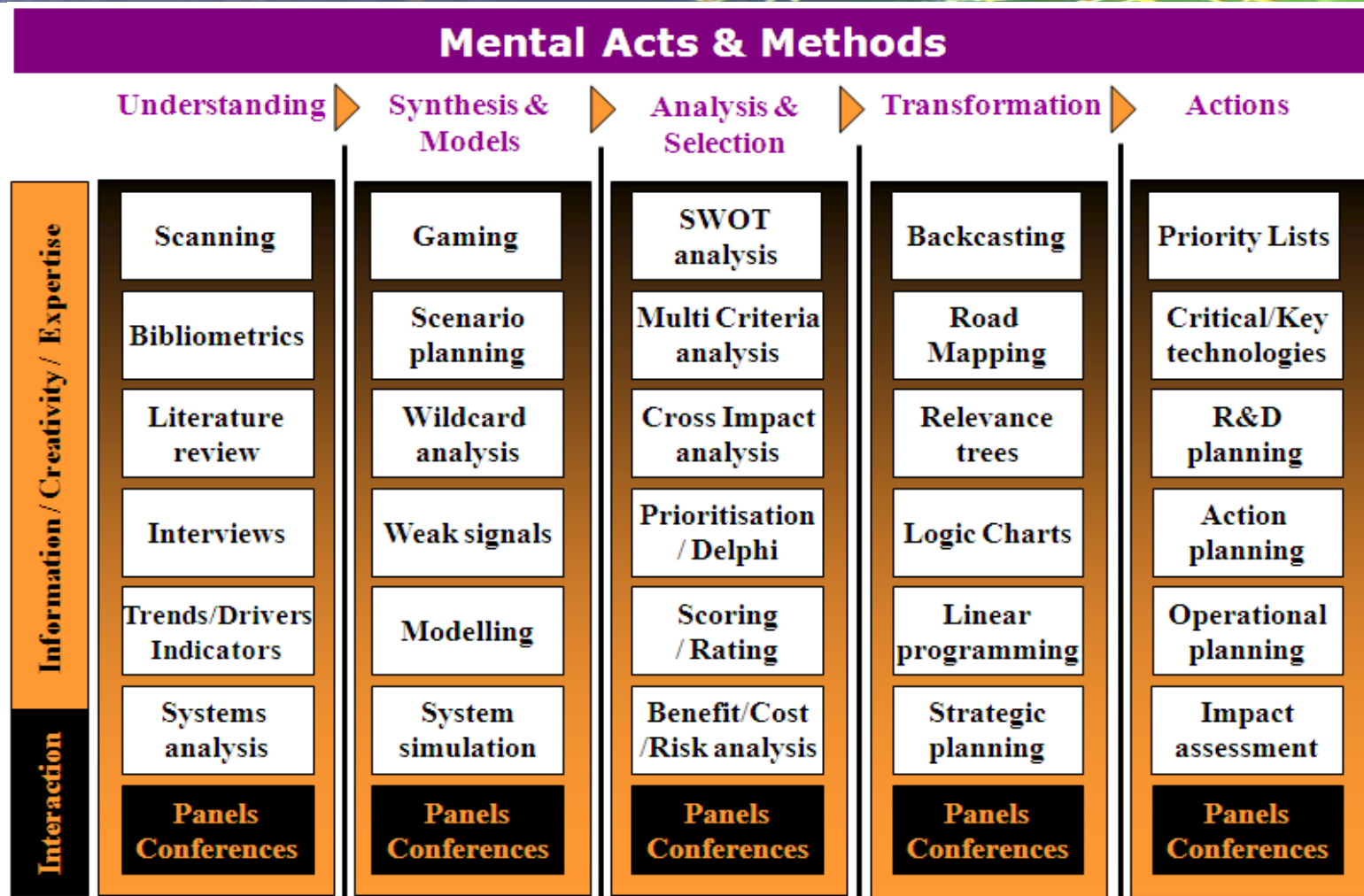
Establishes the relationship between the future and the present for a change program - applies Intelligence to rigorously analyze foresight results

Systemic Action

Creates plans, and applies Business Analytics Dashboard to inform present day decisions for immediate change to provide structural and behavioural transformations



Manchester Foresight Framework





Saritas-Smith Systemic Foresight Model 2011-12

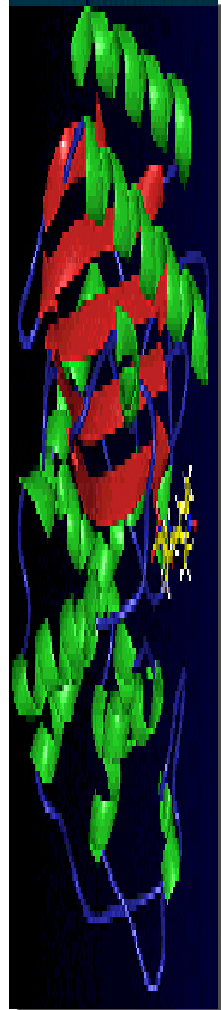
Phases, Functions, Activities and Methods for Agile Foresight Learning

i5 Phases	INTELLIGENCE	IMAGINATION	INTEGRATION	INTERPRETATION	INTERVENTION
Functions	Scoping / surveying	Creative phase	Ordering phase	Strategy phase	Action phase
Activities	Survey, scan, evidence	Concept model, visions, scenarios	Priorities, analysis, negotiations	Agendas, strategies	Plans, policies, actions
Divergent Methods (more open, creative) Convergent methods (more specific, quantitative)	EHS – Environmental Horizon Scanning	AFV – Alternative Future Visions	STH – Six Thinking Hats	FPE – Forward Policy Engagement	RBD – Robust Decision Making
	SOP – State of the Play in the futures field	ISS – Interactive Scenario Strategies	EPS – Expert Panel Synthesis	FDM – Foresight Decision Models	ARI – Accelerating Radical Innovation
	SFI – State of the Future Index	CSA – Causal Layered Analysis	SBC – Situational Back Casting	CIA – Cross Impact Analysis	THI – Triple Helix Integration
	CTI – Competitive Technical Intelligence	ABM – Agent Based Modelling	CSF – Critical Success Factors	TRM – Technology Road Mapping	CTG – Critical Thinking Game
	STM – Statistical Trend Modelling	SAG – Simulation and Games	RTD – Real Time Delphi	TSA – Technology Sequence Analysis	APM – Action Priority Matrix
	TDM – Text Data Mining for Technology Insights	GFI – Genius Forecasting and Intuition	CSC – Computerised Scenario Comparisons	FRT – Factor Relevance Trees	CKT – Critical & Key Technologies

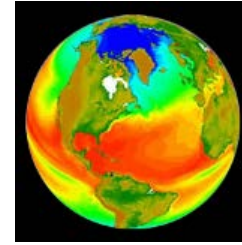


Measuring Foresight Impact

- 2009-2011 meetings of the Govt Foresight Leaders Forum – Hartwell House UKFO; OECD Paris; Policy Horizons Canada;
- Foresight Success Vignettes;
- APEC Center for Technology Foresight – Bangkok International Advisory Board;
- Special Issue of *Foresight Volume 14 #1* February 2012; **Foresight Impacts Around The World**; (incl: Ian Miles, Ron Johnston, NISTEP, Calof & Smith, Riel Miller, Michael Jackson & more
- September 2011: Foresight Impact Measurement Instrument TFCI Canada Inc.



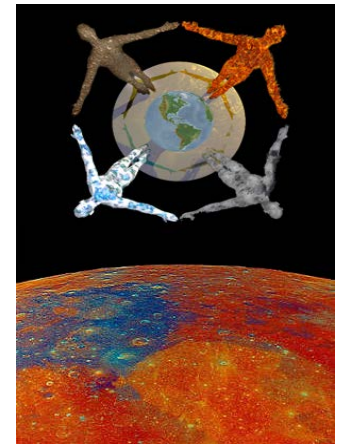
Foresight and Policy- a Symbiotic Relationship

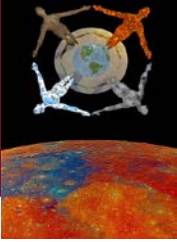


Foresight is varied and has many distinct stakeholders – so we need multiple measures to assess performance and measure impacts; The TFCI – Telfer School instrument relies upon 7 groups:



1. **Roles** that foresight plays for business, government and academia;
2. **Benefits** that can be realized by foresight sponsors, participants;
3. **Critical Success Factors** – how well designed, planned, aligned with sponsors, clients knowledge opportunities etc.
4. **Meta Measures** – e.g. degrees of learning, awareness, exposure to new ideas etc.
5. **Pre-Policy Measures** – how foresight provides direction, insights, strategies for R&D, policy options- analysis;
6. **Policy Support Measures** – ways that foresight provides ongoing support for policies and their implementation;
7. **Post-Policy Actions, Communications** , where foresight helps ensure ongoing credibility, adaptiveness of policies.

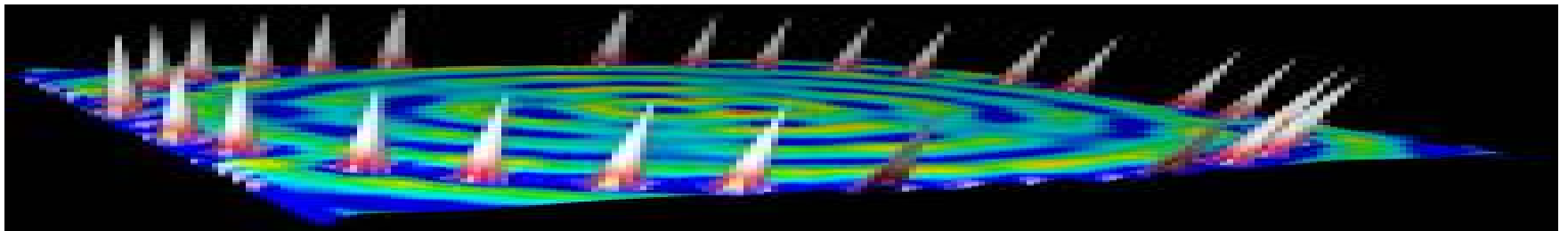




Key Roles Perspective (R. Johnston)

Table 1. Foresight Value Roles & Clients

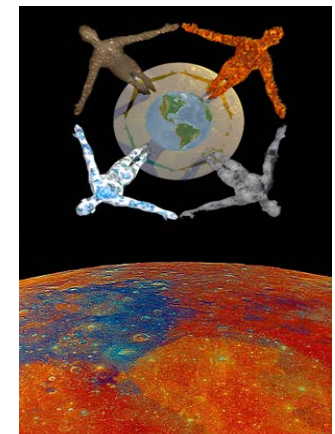
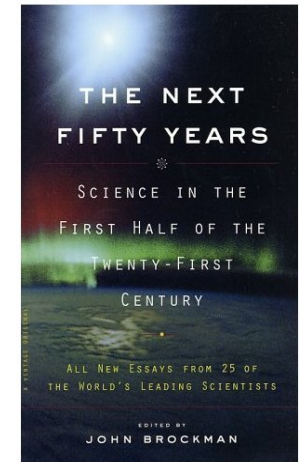
<i>Key Role & Clients Impacted</i>	<i>PM, Minister</i>	<i>Political Advisors</i>	<i>Senior Govt Executives</i>	<i>Govt Policy Advisors</i>	<i>Public Opinion Leaders</i>
1. Awareness raising	<p><i>Each stakeholder group will have different emphasis on each domain</i></p>				
2. Informing					
3. Enabling					
4. Influencing					
5. Evaluating					

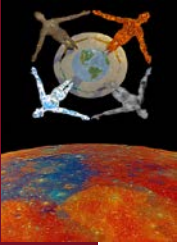


Benefits Perspective (Yuan et al)

Table 3. Foresight Benefits Perspective

<i>Foresight Benefits Categories</i>	<i>Benefits Who Most?</i>
1. Generating national strategy	<p>From a government viewpoint, the benefits are quite widely distributed. The impact framework includes all of these measures, but in a manner aligned with the policy staging familiar to governments. Still, it is important to disaggregate benefits or impacts by distinct client or stakeholder group.</p>
2. Prioritising resources	
3. Changing existing institutions and building partnerships among actors	
4. Enhancing intelligence systems and stimulating the exchange of information	
5. Building early warning systems	
6. Communication and coordination	
7. Propelling societal learning processes	
8. Knowledge management	
9. Stimulating innovative policy making	
10. Enhancing the environment for innovation	
11. Impacting on organizational strategy	
12. Impacting on new product –service development.	

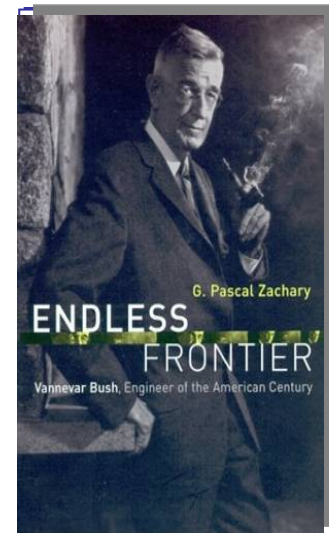
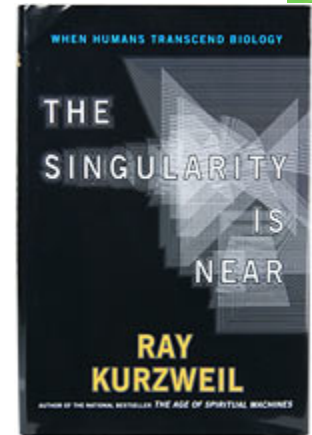


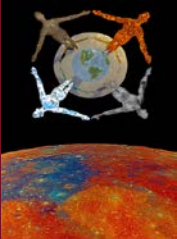


Critical Success Factors Perspective (1-4)

Table 2. Government Foresight Critical Success Factors & Impact Context

<i>Critical Success Factors</i>	<i>Context for Impact Analysis</i>
<ul style="list-style-type: none"> • Focus on a clearly identified client 	<p>Each client will have unique impact priorities - the framework presented in Table 4 broadly addresses the diversity</p>
<ul style="list-style-type: none"> • Establish a clear link between foresight and today's policy agenda 	<p>The nature of the impact will depend upon the stage and emphasis of the policy agenda - the framework identifies four relevant stages, with measures unique to each stage.</p>
<ul style="list-style-type: none"> • Nurture direct links to senior policy-makers 	<p>Champions are the key element and to build political - organizational support - for which demonstrated impacts of various kinds will be essential.</p>
<ul style="list-style-type: none"> • Create strong public-private partnerships 	<p>There are a lot of choices for how one measures the effects of partnership- the framework explores several methods or measures.</p>





Critical Success Factors Perspective (5-8)



Table 2. Government Foresight Critical Success Factors & Impact Context

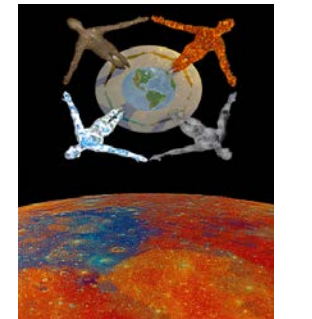
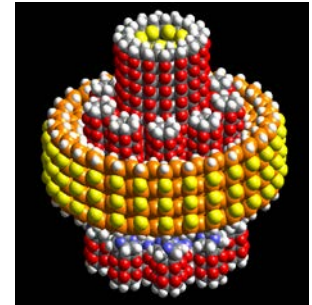
<ul style="list-style-type: none"> • <i>Develop and employ methodologies and skills that are not always used in other departments</i> 	<p>This "useful novelty" feature of foresight suggests the need for comparative impact measures as well - a theme also explored in the draft impact framework.</p>
<ul style="list-style-type: none"> • <i>Ensure a clear communication strategy</i> 	<p>Measuring impact through the assessment of how effective one's communications are, is clearly relevant to the larger issues of why and how foresight adds value through impacts.</p>
<ul style="list-style-type: none"> • <i>Integrate stakeholders into foresight programs</i> 	<p>Impact analysis should be two way- combining both effects on foresight operations from having stakeholders involved and impacts on them as well</p>
<ul style="list-style-type: none"> • <i>Take advantage of or create a national-local academic receptor and training capacity.</i> 	<p>Ultimately, impact involves extending influence and learning beyond those most directly affected, hence the relevance over an extended time period for having an academic and training dimension included</p>

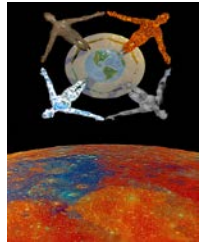


Building A Foresight Impact Measurement Framework

Meta Measures

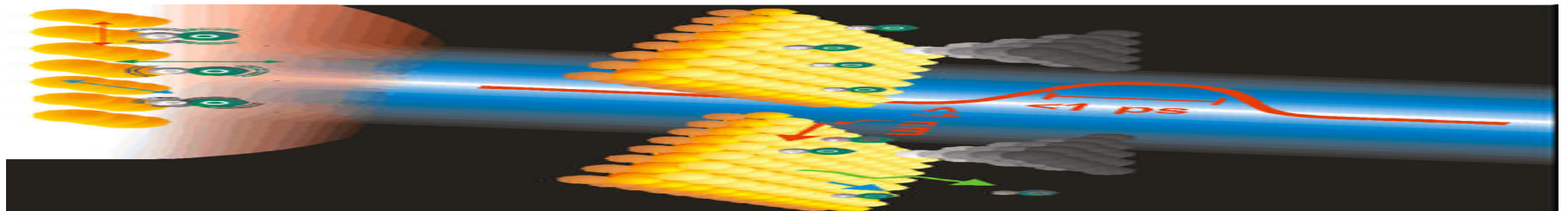
<p>Learning & Education (L&E)</p>	<p>Foresight essentially is a learning process- each foresight project educates someone, and usually all participants.</p>	<p>e.g. Testimonials, anecdotes, resonant personal and institutional stories, evidence of new skills mastery, recognition of terms, stages and insights; calls for advice by leaders based upon past work; reputation for new insights-education.</p> <p><i>Add your measures here</i></p>
<p>Training & Skills Development (T&S)</p>	<p>Foresight is often motivated by sponsors wanting to strengthen readiness , resilience and preparedness skills</p>	<p>e.g. Courses, seminars, training sessions attended; enhanced abilities and capabilities as described by stakeholders, clients, champions; certificates of proficiency, acceptance by professional societies such as the APF.</p>
<p>Strategic Directions (S&D)</p>	<p>Foresight is often initiated to provide guidance, to initiate change in direction, priorities etc.</p>	<p>e.g. Acceptance of new strategies by one's organization; assignments to strategic teams; evidence of foresight in adopted priorities; new direction with foresight derived origins.</p>
<p>Risk – Uncertainty Reduction (R&U)</p>	<p>Foresight is a key tool for risk assessment, and management of uncertainty.</p>	<p>e.g. Statements of risks linked to future uncertainties and the (foresight)process of determining levels of perceived risk and management approaches to these risks.</p>
<p>Design & Planning (D&P)</p>	<p>Foresight is closely aligned with design and planning</p>	<p>e.g. Recognition, evidence and examples of how foresight can or did provide resilience in the form of contingency design and planning for those aspects of design and planning which are inevitably uncertain.</p>

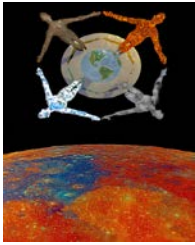




Pre - Policy Developmental Measures

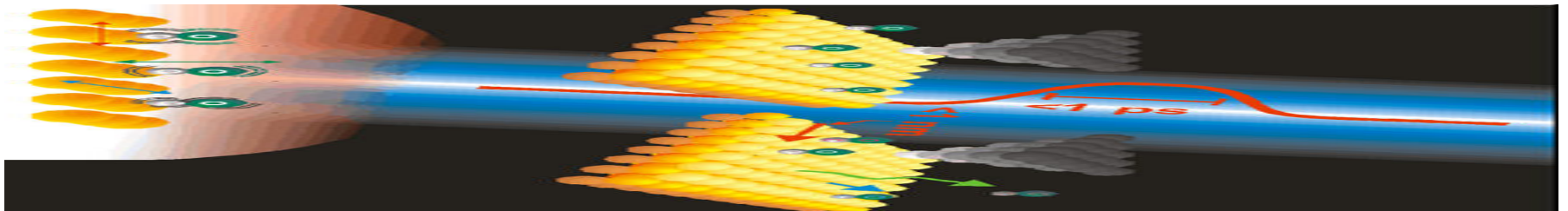
• Research & Development Priorities	2-4	2.85
• New Insights & Knowledge	2-5	3.30
• Adding Creativity, Invention & Imagination	1-5	3.58
• Contribute to Policy Research, Options-Analysis	1-5	3.40
• Educate Leaders on Foresight -Policy Issues	1-5	3.12
• Affect Attitudes & Beliefs	2-5	3.25
• Develop Connections & Networks	2-5	4.33

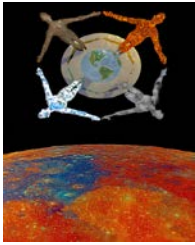




Policy Support Measures

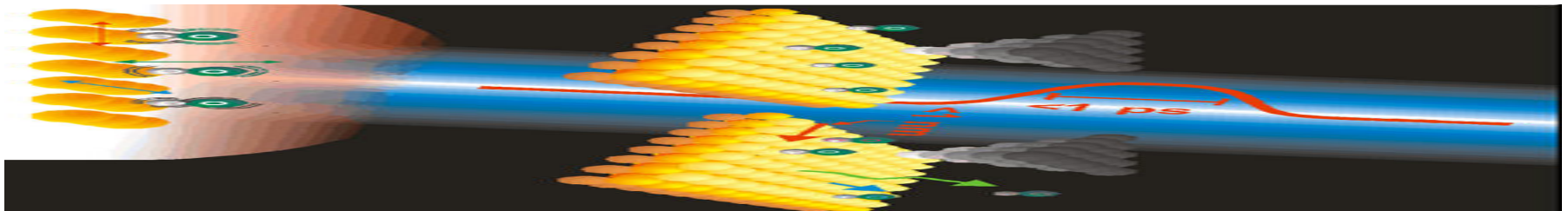
• Stakeholder Engagement & Characterization	1-5	3.42
• Framing Policy Issues, Options & Decisions	1-5	3.36
• Validation & Legitimacy	2-5	3.41
• Advice for Policy Champions	2-4	3.32
• Change Factor Analysis	2-5	3.39
• Socio-Economic Threats & Opportunities	2-4.5	3.25
• Filter for Future Robustness	2-4	3.19
• Manage Complexity, Ambiguity & Horizontal Issues	2-5	3.83





(Post)Policy Implementation Measures

<ul style="list-style-type: none"> • Communication Channels – Identification , Interface 	1-5	3.09
<ul style="list-style-type: none"> • Public and Professional Perception and Appreciation 	2-5	2.92
<ul style="list-style-type: none"> • Innovation, Integration and Implementation Dynamics 	2-5	3.33
<ul style="list-style-type: none"> • Infrastructure Alignment , Resilience 	1-4	2.91
<ul style="list-style-type: none"> • Organizational Development, Adaptation and Renewal 	2-4	3.37
<ul style="list-style-type: none"> • Media Attraction and Messaging 	2-4	2.72
<ul style="list-style-type: none"> • Appeal to Prospective Staff 	3-4	3.11
<ul style="list-style-type: none"> • Lens for Evaluation, Assessment of other Tools 	1-5	3.28





Highest & Lowest Impacts – 54 Measures



Top Five Impacts

# 38 Develop Connections & Networks	2-5	4.33
# 1 Awareness raising	1-5	4.27
#12 Integrate stakeholders into foresight programs	2-5	4.25
# 10 Develop and employ methodologies and skills that are not always used in other departments	1-5	4.15
#31 Seeding opportunity and innovation - creating strategic directions	1-5	3.87



Lowest Five Impacts

# 15 Prioritizing resources	1-5	2.43
# 6 Focus on a clearly identified client	1-4	2.58
# 52 Media Attraction and Messaging	2-4	2.72
# 8 Nurture direct links to senior policy-makers	1-4	2.73
# 27 Training & Skills Development	1-4	2.77